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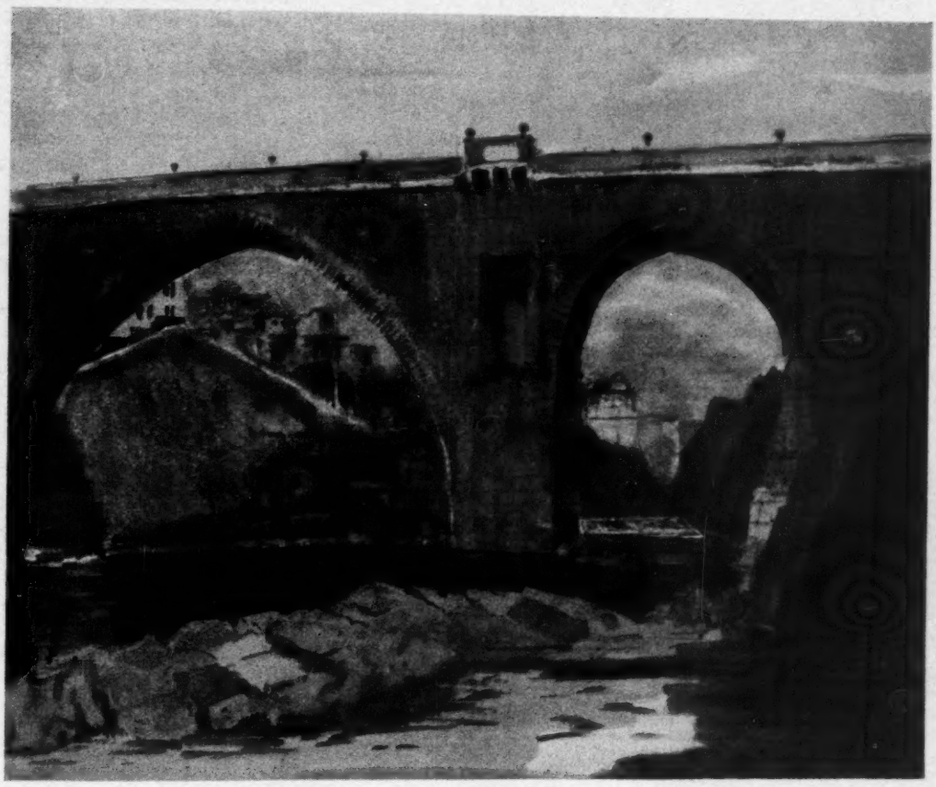


Toledo.

From a drawing by Mr. C. Lovett Gill, F.R.I.B.A.

MEETINGS

Saturday, *February* 7.

Institution of Municipal and County Engineers. Yorkshire District Meeting. At the Town Hall, Leeds. 2.30 p.m.

Monday, *February* 9.

Incorporated Clerks of Works Association. Mr. C. W. Burt on "Tetronite, the Colourless Waterproofing Solution." At the Carpenters' Hall, London Wall, E.C.2. 7.45 p.m.

Chartered Surveyors' Institution. Mr. Christopher Chart on "Claims for Compensation under the Public Health and Roads Improvement Acts, 1925." 8 p.m.

Tuesday, *February* 10.

Royal Sanitary Institute. Discussion on "Recent Methods of Sewage Treatment," to be opened by Lt.-Col. William Butler. 6 p.m.

Institution of Heating and Ventilating Engineers (Manchester Branch). Mr. C. M. Oates on "Panel Heating." At Manchester. 7 p.m.

Incorporated Institute of British Decorators. Mr. E. M. Dinkel on "What is a Decorator?" 8 p.m.

Institute of Fuel. Dr. G. V. Slottman on "Fuel Control in the Iron and Steel Industries." At the Engineers' Club, Manchester. 7 p.m.

Wednesday, *February* 11.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher, P.R.I.B.A., on "The Mediæval Period." 6 p.m.

Institution of Structural Engineers (Lancashire and Cheshire Branch). Professor F. C. Lea on "The Modulus of Elasticity of Concrete." At the College of Technology, Manchester. 7 p.m.

Thursday, *February* 12.

Institution of Structural Engineers. Dr. Oscar Faber on "Modern Buildings as Engineering Structures." 6.30 p.m.

Society of Antiquaries. Sir Harold Brakspear on "A School of West Country Masons." 8.30 p.m.

L.C.C. Geffrye Museum. Mr. A. R. Powys on "Some Old Buildings and how they have been Preserved." At Kingsland-road, E.2. 7.30 p.m.

Hampshire and Isle of Wight Architectural Association. Annual Dinner and Dance. At Southampton.

West Yorkshire Society of Architects. Mr. P. E. Thomas on "Competitions." At the College of Art, Leeds. 7 p.m.

Institution of Electrical Engineers. Annual Dinner. At the Connaught Rooms, Great Queen-street, W.C. 7.30 p.m.

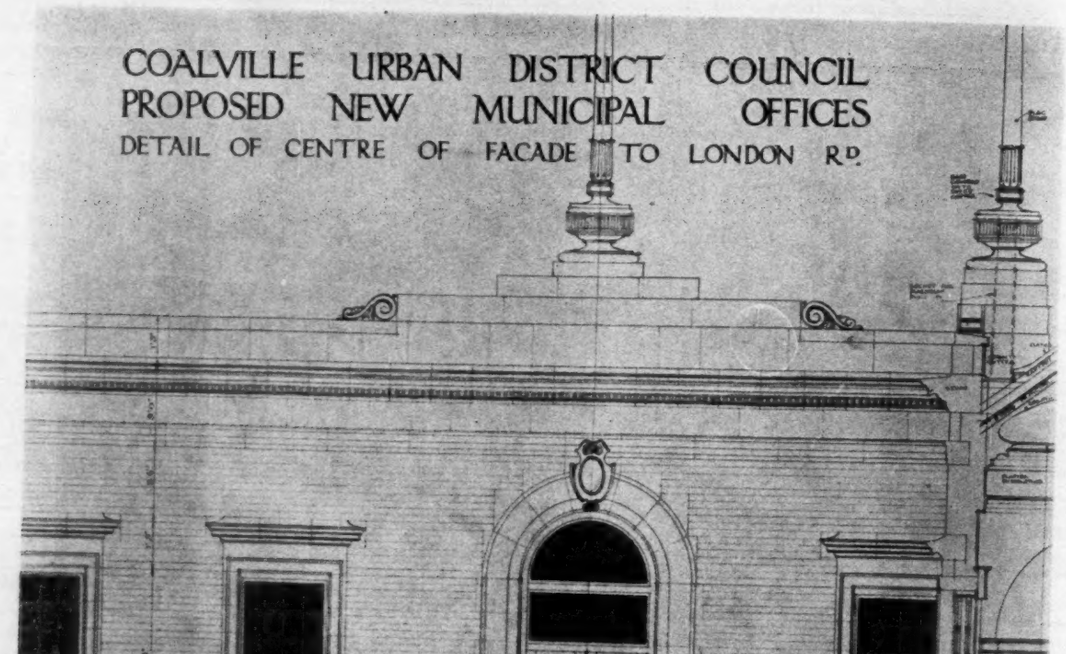
Friday, *February* 13.

Institution of Structural Engineers (Midland Counties Branch). Discussion on "Foundations," opened by Mr. S. L. Hordle. At Birmingham. 7 p.m.

Town Planning Institute. Dr. Raymond Unwin on "The Relation between Town and Regional Planning." 6 p.m.

Saturday, *February* 14.

Architectural Association. Mr. H. Austen Hall on "The Architect's Problem in a large Building." 3 p.m.



Competition for New Municipal Buildings, Coalville, Leicestershire: Second Premiated Design.

By Mr. Arthur J. Wood, F.R.I.B.A.

CALCULATIONS

WE may take it that events in which the will of man appears to predominate come about part out of dreams and part out of calculation; and to these we may perhaps add an instinct which is the complement of human ability. Ages, factions and persons have differed from time to time and place to place as to which of these three elements must predominate as the motive force of achievement; and upon the way in which these constituent parts have been prejudged has been built up the mental code which has inspired whole nations and generations.

Looking back through architectural history, one is apt to take it for granted that the men who left the treasures we strive to preserve were the subjects chiefly of an inspiration which carried them straight to the truth, or so near to it that we of blunt senses can detect no difference. It is indeed hard to think of the Parthenon as other than a structural truth which the builders sensed in their whole being; or of a Gothic cathedral which was calculated other than in the eye of instinct and experience. Yet we know there must have been a great deal of the matter-of-fact to produce these things, the existence of which is fact. Lack of record, or perhaps excess of sentiment, holds our mind to the vision of inspired builders, rather than to the skill and knowledge of wise craftsmen. And as a reaction to this record of history there come to us to-day those who would have it that this is an age in which science predominates so much that all other influence upon the arts and crafts is sham and dated.

Hand workmanship is slow and costly. Machine production is cheap and unlimited in scope, and one machine can supplant a hundred men and work with greater precision. Therefore, the modernist seems to say, let us drift—nay, let us march with this tendency. Forget the traditions of the hand-craftsman, and let us ignore what he can give us when we design what is to be done. Let our buildings be like the machine which governs the age—sleek and efficient. Let us carve off the turrets and domes and pinnacles which our ancestors delighted in, and rule off our building when we have got all we want for practical purposes. Let us go even further, and though we can see a practical purpose in a pitched roof, let us deny it as too typical of the old building tradition and finish flat. These people would, it appears, have us respect the machine, and the machine only; and subordinate our instincts to the differential calculus.

The chance for the pure reactionary arrives when the scientist is checked, and such occasions present the risk of equally unreasonable reasoning as a powerful influence upon modern approach. There are critics who have said that the terrible disaster which so quickly overtook that great product of calculation, the R 101, proved one thing above all others: that events can knock human calculations "into a cocked hat," and that scientific research reaches less far than the instinctive or slowly evolving craft which produced the beautiful sailing ships, the simple farm waggons, the triumphant buildings which time has proved. We see a real danger to progress in this reaction of depression.

We are not competent to judge the merits or defects of airship building, and we do not propose to comment upon the subject, whatever our interest may be in the recent inquiry. But the mere use of the word "building" may give us, who are connected with the building trade, a greater reason for pause than others who regard the tragic event as but one more gripping subject for the news columns. If we connect at all in our minds the lattice construction of the airship with the steel frames of modern buildings; if we think of the gale which may have driven it down, playing equally upon the flanks of a high building, or of the weight of rain adding itself to the acres of flat roof which modern London has acquired; we may also expect some interested in building to say to themselves: "Here was a great scientific product, the fruit of many years of involved calculation, test and experiment; so much believed in, that the country trusted some of its greatest men to it; and yet Nature beat it and proved it false almost at first meeting. Are we so sure of our great buildings, which grow up as a result of applied formulae, accurate arithmetic, and scientific forethought?"

To feel in this way is of course to have lost all sense of proportion. We do not know yet whether the disaster was of mechanical origin or the result of a failure of that most fickle of elements, the human one. And even if we knew for a fact that some stress or strain had been miscalculated, or that some scientific test had been inadequate, or based on conditions unrelated to experienced fact, the problems of airship building are so much more complicated than those of the buildings we are familiar with, that we cannot compare the two in either difficulties or risks.

The builder upon the ground has only static forces to deal with. Within certain limits, the conditions once provided for, maintain, relatively speaking, for ever. He has not to adjust to a fine point the balance between strength and weight, bulk and stress, to anything like the fine point the airship builder must respect. There is no limit to the factor of safety he may adopt, other than the cost out-of-pocket. Under ordinary conditions, the member he designs as a strut remains a strut, and the tie a tie, so long as the building remains. He has always a foundation to rely upon as the great starting point of his project. The airship has few of these facilities. Whatever the desire for a reserve of strength, and the need of it, an excess of caution would mean that the airship became a ground ship. New materials which will at once relieve weight and provide the reserve of strength must be used and sought; and with these, experience must give way to artificial experiment. Once in the air, we imagine conditions may make a member one minute a strut, and the next a tie, and back again a thousand times in an hour. Truly we builders on a rock, or firm ballast, or the hard blue clay under London, may feel that ours is indeed a simple task compared with this venture which did so much in a little time, and ended so terribly. Science has always paid its quota to building achievement, and it will continue to do so in increasing measure. But it must always share the task with the instinct of the true builder, and the inspiration of the true artist. The architect who attempts to ignore one or more of these necessary factors, will achieve either disaster or bathos, and the latter seems to be the fate in store for those who adopt the machine cult in the design of modern buildings.

The tragedy at Beauvais is not a lesson to destroy any article of our faith—whether confidence in our scientific knowledge or in the ability of our scientists. It may, however, serve as a reminder, when we pit ourselves against the forces of Nature, and hold the safety of other men in our hands, that Nature pays little respect to the static laws, and that the calculations of men, if not explored to their limit, may be thrown completely out of gear by the vagary of some natural condition assumed to be stable, whether it be the consistency of one manufactured member, or the stability of some hitherto quiescent substratum. But so far as we can see, these are matters well within the powers of our structural scientists to anticipate and cope with.

To add to their science is that inherent instinct which is the heritage of the born designer of buildings, and also that conservative caution which the responsibility of building instills into its exponents, more especially in this conservative country. If we add together these factors of safety we need not let one more disaster in an allied practice of science, read as a sign that we may give up thinking for ourselves and place our reliance solely in Fate. By that road lies a reversion to the primitive.

NOTES

Competition "Tyranny."

The Royal Institute of British Architects is an association whose principles are generally accepted as correct by the architectural profession. But the Institute's idea of controlling architectural competitions has just been referred to as "tyranny" worse than in any trade union. This criticism comes from a representative on an Urban Council whose competition was banned by the R.I.B.A. because the local council did not approve of the appointment of an Institute adjudicator, with the payment of the usual assessor's fee. The unfortunate part about it all is that the local Council, it is stated, were not informed that the competition was not in accordance with accepted regulations until five weeks after the announcement had been made and many architects were already preparing plans. At the conclusion of the competition, only four sets of designs were received, from which we may infer that several architects refrained from sending in designs at the last moment. There are architects who have different opinions on these competition rules, yet it is no doubt for the good of the profession—and the country as well—that such control in competitions should exist Otherwise we might find architects working hard on competitions with very little prospect of a just financial reward, even if successful in gaining an award.

A Bristol Competition.

Some unusual features will be found in the conditions (reprinted on page 266) for the proposed competition for the Bristol War Memorial. Bristol architects and their assistants are invited to submit designs which will be considered by Mr. G. C. Lawrence, F.R.I.B.A., the assessor nominated by the Royal Institute of British Architects. From the designs submitted Mr. Lawrence will select a number (we quote from the conditions) which he considers suitable. These will then be reproduced in the local Bristol newspaper, whose readers will then be asked to vote upon them. The design most favoured by the ballot will then be placed before the assessor, and if, in his opinion, it is practicable, it will be presented to the War Memorial Committee. Should, however, the assessor differ, on technical grounds, and pronounce for an alternative submitted design, that design will be put forward. Thus it will be seen that while the public are invited to pronounce an opinion, that opinion is still subject to the approval of the assessor.

The Cathedral Commission.

It is typical of our modern methods that there have been selected as members of the Commission to be appointed under the Cathedrals Measure not one who, as has been pointed out, is an historian of repute, an architect, a lawyer, or an authority on archæology. To the cathedral authorities the selected names may be convincing, but to the outside public the omissions are very difficult to understand.

The London Building Act.

The London County Council announce that for some time past they have had "under consideration the question whether steps should be taken to examine thoroughly the provisions of the London Building Act, with a view to ascertaining whether any, and, if so, what amendments are desirable to bring the law into line with modern practice and present requirements in building construction." They have decided that the Act should be examined by an impartial and authoritative body, representative of the many interests concerned, and that the Council should refer the whole question to it for investigation. The Advisory Committee which is to be set up will consist of ten members of the Council, and one representative to be appointed by each of the following bodies:—the Metropolitan Boroughs Standing Joint Committee, the Royal Institute of British Architects, the Chartered Surveyors' Institution, the Institution of Civil Engineers, the Town Planning Institute, the London Master Builders' Association, the National Federation of Building Trades' Operatives and the London Employers' Association. It is understood that already a considerable amount of information has been collected by the officers of the L.C.C. with a view to this revision. The main question, however, to be decided will be whether a revised Building Act will be sanctioned by Parliament which will quickly be out of date or whether London will agree that its building be controlled by by-laws which on the whole have worked successfully in other industrial cities. There is much to be said for building by-laws which are elastic and can be quickly revised to meet new conditions as they arise.

Modern Church Building.

Professor W. R. Lethaby's thoughtful article which we publish this week (see p.283) deals not only with modern church building, but with cognate matters of style, design, craftsmanship and modern tendencies in art. That his remarks will be read with interest, if not with complete agreement, we have no doubt, but we venture to detach and quote here one part of his contribution which we are inclined to think our readers will generally endorse: "The character," he says, "of our current picture exhibitions is in large part a consequence of there being little or no demand for pictorial work for serious purposes. We train thousands of artists, and then leave them to despair and the mad effort to be talked about. Is it to

Fig. 1.—A Typical Siamese Buddhist Temple.

(See page 267).

be wondered at that we get angry compositions in purple and emerald green? If the English Church and other educational bodies would demand work expressive of full humanity, we may not doubt that it would be forthcoming. If only a few paintings were commissioned every year or bought from the exhibitions, many would be produced and an avenue of thought and practice opened out. Even a two-guinea water-colour of green fields or corn-sheaves, which was true and touching, hung in a city church, would be more healing and helpful than a million fleur-de-lis and rosettes. Some inscriptions done in the fine lettering which is so easily obtainable would *say* something to heart and mind. Similarly in regard to sculpture, with the exception of a few memorials which have been provided by external means and then placed in churches, I cannot think of any ecclesiastical sculpture which can rank as a work of art with a soul of its own. Might not some fund be established for collecting works of vital art to be sold or otherwise distributed to churches?"

Dorking. So well attended was Mr. Clough Williams-Ellis's lecture, entitled "So this is Dorking," at the New Halls, Dorking, on Friday last, that some 100 or more would-be listeners were unable to gain admittance. Can it be that people are waking up to the gradual, or shall we say rapid, destruction of the beautiful old houses and countryside so rapidly being swept away? It is not uncommon to be turned away from theatre, football match or cinema, but from a lecture of this kind! Well, "the man in the street" is awakening. The lecturer had some pleasant as well as unpleasant things to say, and he did not forget the multiple shops and the shopfronts of a stock pattern sometimes put into old Georgian houses.

"Jerry" Builders at Windsor. THOSE who believe that "jerry" building is a comparatively modern tendency should turn to page 288 where the Dean of Windsor's lecture to the Royal Society of Arts on the Restoration of St. George's Chapel, Windsor, is reported. The manner in which various of the structural members of the chapel were built was such that, taking as an example the vaulting, in the Dean's words, "as the springers were not bonded into the walls at all, there was consequently no scientific reason why the vaulting stood in place." That it did so stand must be counted an Act of God. Again, on the south side of the chapel the builders did not take the trouble to carry the foundations into the chalk but stopped 18 inches short, leaving clay between. This clay naturally compressed, the walls gave outward, and the centre of the vault dropped about 11 inches. Luckily, it stopped there, but great cracks developed. The builders' crowning folly, however, was in connection with the southerly of the two little chapels which Henry VII built on to his west front. This little chapel was built over a chalk pit and instead of taking the foundations down to the bottom of the pit "a feeble, roughly-built arch was built over the hole" and by this the chapel gained its only support.

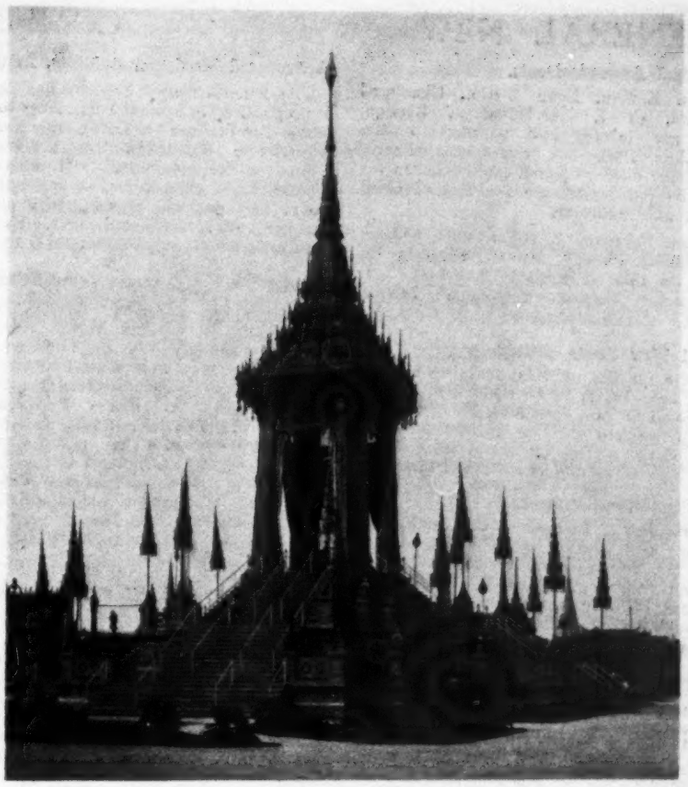


Fig. 2.—The Siamese Royal Funeral Pyre.

(See page 267.)

Government Committee on Regional Development. A DEPARTMENTAL Committee was recently appointed by the Minister of Health with the concurrence of the Minister of Transport and the Secretary for Scotland, to consider the reports issued by the Regional Planning Committees and to recommend:—(*a*) What schemes of work can be put in hand with due regard to the return to the community from the expenditure incurred, the need of pressing forward with the work as expeditiously as possible and of avoiding the delay of other works now being or shortly to be executed; and (*b*) what measures should be taken in order to secure that the works shall be speedily carried out, with an estimate of the probable cost of the several schemes, the economic return and the amount of employment likely to be afforded by them. The chairman is the Rt. Hon. Lord Chelmsford, and there are twelve members, of whom three are architects and two are surveyors.

The Late Harry Clarke. HARRY CLARKE, whose death in Switzerland has been announced, was one of the few artists who have been intimately connected with architecture. His stained glass, with its brilliance of colour and jewelled effect is known throughout the world. He owed his original training to Mr. A. E. Child at Dublin, and he continued his studies in England and abroad. Members of the R.I.B.A. conference next June will have an opportunity of seeing one of his finest works, the great east window in St. Joseph's Church, Terenure, Dublin. Scotland possesses another outstanding example in the Convent of Notre Dame, Dowan Hill, Glasgow, and one of his latest works was a window presented by the Free State Government to the International Labour Building at Geneva. In addition his illustrations to Hans Andersen's fairy tales, Edgar Allan Poe's sinister stories, and Goethe's Faust will take a high place in black-and-white work. He was a man of great personal charm, and his early death has deprived Ireland and the world of a very fine artist.

The Burlington Fine Arts Club. THERE has seldom been a more interesting and delightful exhibition at the Burlington Fine Arts Club than the collection now arranged—the gallery of furniture, pictures and other works of art. Everything shown has an especially excellent quality from the large picture by Cuyp down to the exquisite little Corot. Some lovely glass, fine Chinese porcelain, bronzes and carvings, provide quite a varied exhibition of fine craftsmanship. This small exhibition shows that we still hold in private possession some of the choicest works of art.

GENERAL NEWS

Professional Announcements.

Messrs. Emden, Egan & Co., Chartered Architects, of 7, Garrick-street, London, W.C.2, are taking into partnership Mr. W. H. Arend, who has been associated with the firm for over 19 years, and who has for some time past filled the position of chief assistant and manager.

As from February 2, the London address of Mr. Edwin Tweedy, quantity surveyor (in addition to that at Enfield), has been 2/3, Norfolk-street, Strand. Telephone: Temple Bar 8656. Catalogues are invited.

Proposed New Leeds College.

A centre for the physical training college for men teachers is to be erected at Leeds. Plans are to be sent to the Board of Education, and tenders will be invited for the erection of the college on the Beckett Park estate. The estimated cost is £30,000.

Heating and Ventilating Engineers.

The presidential address to the Institution of Heating and Ventilating Engineers will be read by Mr. Sam Fox, at the Hotel Russell, W.C.1, on February 11, at 2.30 p.m., during the course of the annual general meeting. The annual dinner is fixed for 7 p.m., the same evening, at the Hotel Russell.

Travel Posters Exhibition.

An exhibition of architectural travel posters arranged by the Royal Institute of British Architects will be held at 9, Conduit-street, London, W.1, from February 12 to 27. Admission will be free and members of the public are cordially invited to attend. The exhibition will be open from 10 a.m. to 8 p.m. Saturdays 10 a.m. to 5 p.m.)

Royal Academy Summer Exhibition.

The receiving day for architectural drawings for the above exhibition has been fixed for Friday, March 27, from 8 a.m. to 10 p.m. Not more than three works may be sent by any one artist. All works must be delivered (unpacked) at the Burlington-gardens entrance. Labels and forms can be obtained (during the month of March only) from the Secretary, Royal Academy of Arts, Piccadilly, W.1. The exhibition opens on Monday, May 4.

Proposed New Town Hall for Southend.

Southend Corporation has now before it a plan prepared by Professor S. D. Adshead, F.R.I.B.A., 46, Great Russell-street, W.C.1, for a new town hall to cost £351,000. The site selected is in Victoria-avenue. At present officials are housed in shops and houses because of the lack of accommodation in the municipal buildings. It was agreed to hold a special meeting to consider the scheme.

Features of English Cathedrals.

Sir Banister Fletcher, P.R.I.B.A., lecturing at the Central School of Arts and Crafts on Wednesday last, described the evolution of piers from the stumpy cylindrical pillar and compound pier of the Normans to the shafted pier of Early English and moulded pier of later times, and the various forms of bases, and carved and moulded capitals, and proceeded to explain the development of mouldings from the simple rounding of corners in early Norman times to the elaborate mouldings of later Gothic architecture, illustrated by slides. Towers he referred to as one of the most beautiful creations of Mediæval architecture, which formed the keep of the House of God; and spires, which were not due to a constructive necessity but were a concession to religious symbolism, afforded a contrast to the horizontal lines of the nave roof. Finally, the lecturer described the different types of open timber roof, which, he said, bore witness to the excellence of English carpenters, and greatly enhanced the beauty of many of the mediæval churches and halls of old England.

COMPETITION NEWS

A Proposed Municipal Building, Leicester.

The Leicester City Council has approved a proposal by a special committee to invite plans for a new building to house the Electricity, Rates, Motor Licence and Valuation Departments. It was recommended that an assessor be appointed at a fee of fifty guineas, plus one-fifth per cent. on the total estimated cost, and that premiums be offered of £300, £200 and £100.

An Arc-Welding Literary Competition.

Papers on subjects related to the adaptability of welding in the redesign of present machinery from cast iron or riveted steel structures to welded steel structures are invited by the Lincoln Electric Co., of Cleveland, Ohio, U.S.A. Prizes of £1,500, £700, £300, £150, £100, £50 and 35 further prizes of £20 are offered. The jury of award will be composed of the members of the Electrical Engineering Department of the Ohio State University. Full details are obtainable from the company at P.O. Box 683, Cleveland, Ohio, U.S.A. Papers must be sent in by October 31, 1931.

Proposed New Council School at Blower's Green, Dudley.

The Dudley Education Authority invites architects having an office within a radius of 15 miles of Dudley to submit designs in competition for a proposed new Council school, two departments—infants' and junior department for 400 children, senior department for 480 children—to be erected at Blower's Green, Dudley. Mr. H. T. Buckland, F.R.I.B.A., of Norwich Union Chambers, Congreve-street, Birmingham, is the assessor. Applications for conditions of competition and site plan should be made to Mr. J. Whaley, Director of Education, Education Offices, St. James's-road, Dudley, accompanied by a payment of £1, returnable on receipt of a *bona-fide* design or upon return of the conditions on or before May 18. Designs have to be sent in by June 1.

Central Municipal Bank, Birmingham.

The committee of management of the Birmingham Municipal Bank invite British architects practising in the British Isles to submit designs for a Central Municipal Bank and head offices. Sir Reginald Blomfield, R.A., has been appointed assessor, and premiums of £400, £300 and £150 are offered, as announced in *The Builder* for January 16. A block plan is given herewith. The site is situated in Broad-street, adjacent to the Masonic Hall, and forms part of the lay-out of the new Civic Centre. The front elevation, facing Broad-street, and the west elevation are to be faced with Portland stone. The maximum cost will be £75,000. Conditions are obtainable upon deposit of £3 3s., from Mr. H. H. Humphries, the City Engineer and Surveyor, Birmingham, to whom any question that intending competitors may ask must be addressed by February 28. The closing date is Saturday, April 18.

Proposed Technical Schools, Carlisle.

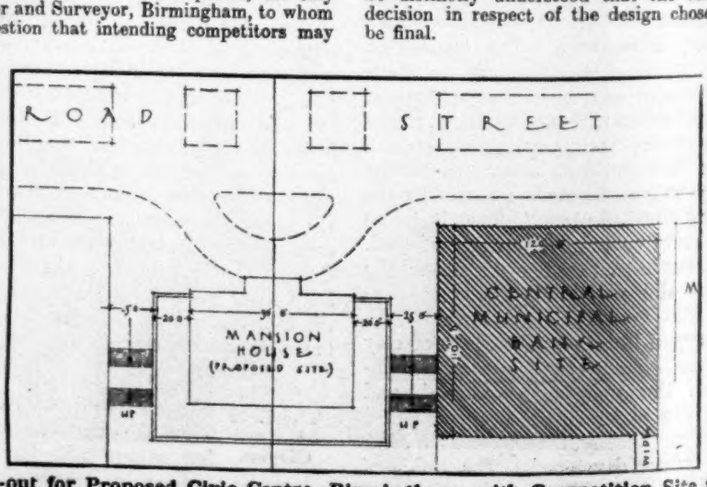
At a recent meeting of Carlisle City Council, Mr. Charlton moved the confirmation of the Education Committee's minutes, in which it was recommended that, in order to appoint an architect to carry out the erection of the new Technical and Central Schools, an open competition be held, and that the Organisation Committee be authorised to appoint an assessor to conduct the open competition in connection with the appointment of an architect, subject to the rules of the Royal Institute of British Architects.

Mr. G. H. Smith moved, as an amendment, that the recommendation be deleted, and that the Education Committee be requested to appoint an architect with experience in designing modern schools. He said they had been waiting for the new schools, and they did not desire further delay by the holding of a competition. They wanted to get on with the job.. The amendment was carried.

Bristol War Memorial.

"The Bristol Times and Mirror" has issued an invitation to Bristol architects and their assistants to submit designs in competition for a War Memorial in Colston-avenue, Bristol.

These will be considered by Mr. G. C. Lawrence, F.R.I.B.A., the assessor nominated by the President of the Royal Institute of British Architects. From the designs submitted Mr. Lawrence will select a number which he considers suitable, and these will be published in the "Bristol Times and Mirror," whose readers will then be asked to vote on these designs. The design most favoured by ballot will be placed before the assessor, and if it is in his opinion practicable it will be presented to the War Memorial Committee. Should the assessor, however, differ, on technical grounds, from the opinion of the majority by ballot, and pronounce for an alternative submitted design, that design will be placed before the War Memorial Committee. Apart from this, however, the architect or assistant architect whose design has been placed top by ballot will be awarded a cheque for 10 guineas irrespective of his design being finally selected. The architect whose design is finally chosen will carry out the work of erecting the memorial, and will receive the customary fees in accordance with the Royal Institute of British Architects' schedule. Full conditions of the Bristol War Memorial Design Competition as laid down by the Regulations of the Royal Institute of British Architects, may be obtained from the Editor of the newspaper in question, St. Stephen-street, Bristol. It must be distinctly understood that the assessor's decision in respect of the design chosen will be final.



Lay-out for Proposed Civic Centre, Birmingham, with Competition Site for Municipal Bank.

CORRESPONDENCE

"Beauty and Ugliness."

SIR,—It seems quite evident that I cannot hope to convince Mr. William Davidson that beauty in building (or in anything else for that matter) may be entirely independent of expensive material or workmanship. I feel sure it will not satisfy him to admit the obvious truth that sometimes a choice and expensive material may give added beauty to good design; he has clearly made up his mind that any cheapness is in itself undesirable and must inevitably result in ugliness, whatever the quality of workmanship or design. And so I must regretfully give him up!

Many of your readers, however, who have outlived the old theory of fifty years ago that architecture is necessarily elaborated or ornamented building, will, I think, agree that the choice of material should be for its essential suitability for its purpose considering all conditions, and not for its expensiveness: that workmanship should be assessed mainly for its simple sanity and straightforwardness rather than for the application of any "arts-and-crafts" trimmings, and that true beauty in cottage building (which we have been discussing rather than "excellent architecture" in castle towers) relies more on simple proportions and the use of old traditional methods and local materials than on the most lavish expenditure which ignores these principles. That, throughout this correspondence, has been the whole basis of my argument.

A. EDGAR BERESFORD.

SIR,—Mr. Davidson's frequent contributions to your correspodence columns interest me. I like the sparkle with which he deals with what might sometimes be quite dry and uncontroversial subjects if presented by another author.

Mr. Davidson is a prophet. He lives (in the spirit) with the art masters of the past, and so long as he has ink and paper, they shall not be forgotten or unsung.

He wants us modern fellows to employ or be employed, presumably as the ancients were, not for filthy lucre's sake, but for the supreme love of art. I would suggest, however, that art and every vocation is a means to an end and the end is the full enjoyment of life. We moderns put life before art and when we reach in life the perfection that Mr. Davidson sees in the art of the past, our art product then will, perhaps, surpass all Mr. Davidson's dreams. But let us make money!

JAS. R.

"Temples in Stones."

SIR,—In a recent number [January 16] you published a rather interesting illustration, "Temples in Stones," which singularly brings back to one's mind the countless temples in all parts of Asia wherever the influence of Indian arts was felt. The overlapping pointed roofs certainly bear a very close resemblance to what one always sees in Siam at the present day.

The accompanying photographs will illustrate my statement as well as give your readers a few typical examples of Siamese architecture. In Fig. 4 is shown a distant view of the old Royal Palace in Bangkok. This building is a hybrid of East and West, of Siamese and European. It has three stories in three western styles and to relieve its barrack-like appearance a purely Siamese roof is superimposed, with all its adjuncts, namely, its sharp pointed spires, and its overlapping gables with serpent's-head projection at each vertex. In Fig. 1 (p. 264) is shown a typical Siamese Buddhist temple, complete with the usual preaching-hall and a conical pagoda.

Fig. 3 shows the Pantheon of Bangkok, with its roof in the form of a Cambodian tower. The Siamese royal funeral pyre in Fig. 2 (p. 265) will remind Londoners of their grotesque counterpart, the Albert Memorial. This type of structure, however, is of a temporal nature, since it is only erected for the cremation of deceased royalty of Siam and then demolished.

S. K. NIMHANMINNE, B.Sc.

Princes-road, S.W.19.

[Further correspondence is on page 287.]

THE GUILDFORD COMPETITION

THE FACTS: BY ANOTHER ARCHITECT.

FROM one who has been in close touch with most of the stages of this matter, though in no way connected either with any of the Committee or with any of the "selected five," a plain statement of fact may do something to restore the balance of judgment at present prejudiced by "An Architect's Criticism" in last week's issue of *The Builder*.

The author of that criticism has entirely misconstrued all the following salient facts:—

(1) The Guildford Cathedral Competition has not yet started;

(2) Mr. Tapper is the Committee's adviser in the selection of competitors in a future limited competition;

(3) Mr. Tapper becomes the assessor of the limited competition, and will no doubt act in every way as assessors do under R.I.B.A. terms;

(4) The monies to be paid to the selected five are fees for professional services rendered in submitting schemes. They are not prizes for successful competitors.

(5) The situation is exactly the same as when the Committee's first invitation was advertised, so far as any principle is concerned, at which time criticisms might have been more gracefully made than now.

The Committee had a choice of the following courses in their search for the best scheme for Guildford Cathedral:—

(1) To appoint an architect;

(2) To promote an open competition in either one or two stages;

(3) To promote a limited competition.

The first was thought inadequate and the second wasteful of time and labour. Having settled upon the third choice, the course open became:—

(1) To invite a specific number of well-known ecclesiastical architects;

(2) To select from all ecclesiastical architects who applied for admission;

(3) To examine dispassionately all and sundry who could submit evidence of their particular ability in ecclesiastical work.

The first and second courses risked the loss of unknown genius, and the third was followed with the support of technical advice. The selection has accordingly been made and the competition is ready to start, so soon as the conditions have been framed. The whole course of events has been thoroughly logical and has violated no principle of R.I.B.A. competition practice, and there is no reason to suppose that any such principle will be violated in any subsequent stage.

Had the Committee followed the first course, viz., selected so many well-known names, much of the present criticism would have either fallen to the ground or have been directed from a fresh angle. It is their care to explore a wider field which has drawn fire. So much for the abstract argument.

If the result of the present course of action had brought about an unsatisfactory result, the argument might well go to the wall, so far as I am concerned. The sort of unsatisfactory result I have in mind, which might have come about where a lay body allowed itself to override or ignore technical advice, is the following:—

(1) The preponderance of well-known names irrespective of their work;

(2) The absence of unknown, or little-known names, however worthy;

(3) The inclusion of local names, irrespective of their work.

A glance through the names of the selected five will show that many names which are household words in connection with church, and even cathedral, design, are absent; that more than one name is little known, even within the profession; and that no Guildford architect, or, indeed, any architect with an office within twenty miles of that town, has been successful. There is no reason on the face of things why the well-known names should not have been fit for selection; nor why any unknown name should have proved fit; nor why one or more Guildford men should not have been chosen on merit. But the fact that things have worked out as they have shows without doubt that the Committee have been wise enough to follow the advice of their appointed technician without interference of any sort.

The result, to my mind, is eminently satisfactory, and has set moving the first step towards securing for the South of England the best talent for the greatest work of architecture which this and the next generation is likely to afford.

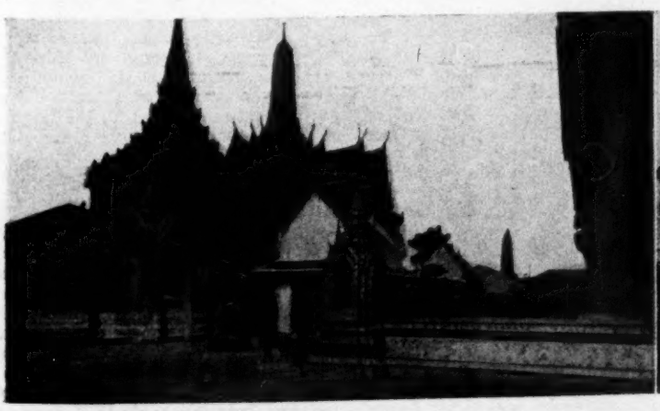


Fig. 3.—The Pantheon of Bangkok.

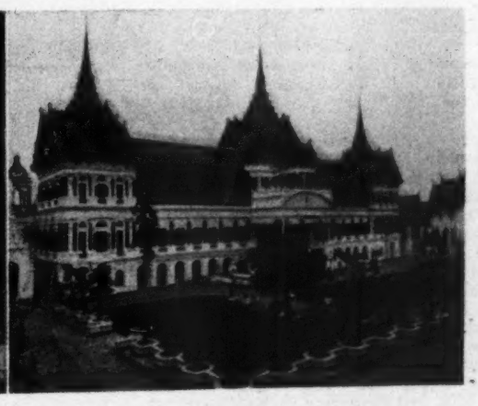


Fig. 4.—The Old Royal Palace, Bangkok.

THE DECORATION OF BUILDINGS.

A LECTURE on this subject, illustrated by lantern slides, was given at the R.I.B.A. on Monday, February 2, under the chairmanship of the President, Sir Banister Fletcher, by Sir William Rothenstein, M.A. Principal of the Royal College of Art.

The lecturer said that very early in his life he had formed the idea that something in the nature of portraying local life was the thing that was going to save English painting, and he had wasted a lot of time going about the provincial towns telling people that if they desired to have anything in the nature of a living art they should, instead of paying £1,000 for a painting of one of their Mayors every ten years, have paintings executed by local artists representing different phases of local life, local people, and, above all, local history. That would afford painters an opportunity of dignified representation of human beings which was very rarely allowed the individual artist. He considered that the proper way to get people interested in art was by representing the ordinary life of any local place rather than by having exhibitions of Persian and Italian art to educate public taste, although he was not decrying their interest and usefulness. We had a wrong notion of what was called decorative art. Architects came to the painters' studios possessed with the idea that they must have hard patches of colour. We all knew that the old Italian painters did the most realistic painting in the world, and yet it was now looked upon as rather primitive and distinctly not what people termed decorative. But if one studied the old masters seriously, one would find infinitely greater variety of life treated. In those pictures were to be found the Italian city, the painters themselves being represented in the pictures; behind them the ordinary life of the town was going on; the prince of great merchants and the poet would be seen walking about the streets. From those one not only got an intensely dramatic interpretation of life, but one had it in relation to an ordinary world which people knew.

If there were a healthy kind of public decoration in England, the local artist, instead of looking towards London as the one place where he could earn his living, would be educated locally, and the best man could be employed and begin quite simply by painting the local landscape, local people, local life, etc. The best of these, of course, would inevitably be drawn to London, but we should have many living schools all over England.

He considered that the young men of to-day had shown a knowledge of composition and a power of carrying out elaborate compositions which had been rare in English painting before. He particularly desired to mention the decorative work which had been done recently by the younger men. Mr. Rex Whistler's decorations at the Tate Gallery were very well known; some extremely interesting decorations had been lately done by Mr. Duncan Grant at the Borough Polytechnic at a cost of £20 each. This latter was a most interesting experiment, but the painting was, perhaps, a little too stylistic because there had been no particular subject imposed. Those people who had been associated with Sir David Cameron in the decorations in St. Stephen's Hall had had their subject given them; they had a certain perspective given them and a certain size for the figures. So far from that being a handicap in their work, it had proved of considerable assistance. When architects said there was not a great deal of latent talent available he felt that they did not know enough about the work of the younger men.

Showing a slide of Watts's decoration in Lincoln's Inn Hall, the lecturer said although it was based on the style of the Venetian painters there was a grand style about it, a perfectly legitimate style for a great central hall.

Showing three slides of Mr. Anning Bell's decorations in St. Stephen's Hall, the lecturer said mosaic was particularly suited to a great stone building of that kind, but it was a very expensive material to work in. After showing further examples of decorations in St. Stephen's Hall, the lecturer showed slides of a number of decorations executed at Morley College, portraying scenes from Shakespearian and Miracle plays. These, said the lecturer, showed a certain Renaissance in art, and it was remarkable that youngsters could do work of that kind on a wall right away.

He appealed to architects for a more serious consideration of decorative art—just a little less money on bricks and mortar and a little more on the co-operation of their colleagues in the other arts.

Sir George Clausen, R.A., moving a vote of thanks, said he admired Sir William Rothenstein for the way in which he had faced the artist's problem. The artist ought to be a useful person. Architects had the power, to some extent, of finding work for artists, and, that being so, they should use them and let the artist feel that he was allowed to do his best and that he was being of use.

Mr. J. Hubert Worthington, seconding, said he had been associated for five years at the Royal College of Art in trying to teach painters and sculptors something about architecture, and it had been his privilege to see a great many of those decorations portrayed on the screen grow. He thought it would be a very good thing if every architect could spend five years at the Royal College of Art; everyone at the Royal College of Art had to have one year's study of architecture. From what he had seen of sculptors and painters, they did get down to their architectural studies in a wonderful way. He would like to suggest that the schools of art were turning out too many sculptors and painters. What was wanted were more craftsmen in wood and ivory. He knew that the tendency was growing every year for the best people to go in for painting, and he thought a most serious position was going to arise in a few years. If care were not exercised buildings were going to be over-functionalistic. He thought that every architect ought to do everything in his power to encourage the painter, sculptor and craftsman. It required courage to give a commission to a young painter, sculptor or craftsman, but as a profession the architects ought to take the initiative and do everything in their power to encourage the younger men of the other crafts.

After further discussion, the vote of thanks was put to the meeting and carried with acclamation. Sir William Rothenstein briefly replied.

TRADITION IN RELATION TO MODERN ARCHITECTURE

DESIGN AND INDUSTRIES ASSOCIATION DEBATE

A DEBATE on this subject took place at a meeting of the Design and Industries Association, held on Thursday, January 29, at the London School of Economics, Houghton-street, W.C.1, under the chairmanship of Mr. Frank Pick.

Professor Beresford Pite, in opening the debate, after a brief reference to architectural history, said before or about the year 1900 there had appeared on the Continent a disintegration between architecture and tradition, followed by a disintegration between painting and tradition, and after that, sculpture and tradition. The architects, in the first place Belgium, second Austria, third Germany, fourth France, began to throw themselves free and embarked on a movement which was eventually labelled "Secessionist." Now we were face to face with the development of that movement, which we had the satisfaction of knowing began in England. At the present time we were attempting to free architecture from its clothes and to exhibit its skeleton, perhaps under a thin coat of plaster. That would bring us face to face with the problem of the due place of constructional expression without the aid, without the addition, of any of the arts of superficial decoration or ornament. Was he wrong in asking that in any criticism some standard other than individual taste, other than the personal subjective taste, was essential? There could not be criticism without tradition on which to base criticism.

What was the position to-day? We accepted modern construction and materials, and were prepared to go in penance to Sydenham and admire the Crystal Palace. We revolted against the played-out forms; we revolted against ornament without meaning. We were all for simplicity in these days. We were now left without a tradition. What were we to work with? Could modern construction as such claim beauty of form? He could not answer that question except by asking whether it aroused a beautiful sensation of form. What was the quality of one's enrichment going to be? Gild your stanchion: would it be any the better for it? Personally, he doubted it. What about proportion; would proportion do it? What was proportion apart from tradition? Nothing. The Greek proportion was justified because of tradition. Was there any abstract quality, breadth, dignity; was there any abstract picturesqueness that one could evolve and apply as an element of design apart from tradition? In the absence of tradition, was any architecture left? Certainly not in monumental art.

But there was an unconscious art, and here was our problem, because we were so self-conscious and could not help it. There was no conscious art in engineering work. Those who craved for a functional architecture should reflect that all the horrors of the Midlands and the North were functional. Frivolity apart, there was an unconscious beauty in a fine engineering work, a beauty which came upon one apart from the success with which it achieved its object. There was an unconscious beauty in any functional art if it was sincere and clean.

There was a need for the intelligent appreciation of tradition in architecture, an intelligent appreciation of the relation of architecture to history; a need to analyse the motive of the mind that created beauty. The civilised world could not be content to live in a city of skeletonised buildings. He suggested a serious study, an analysis of motives, which would ultimately bear architectural fruit in modern buildings.

Mr. Arthur J. Penty said the present age was an age of chaos, of spiritual, moral, æsthetic, intellectual and economic confusion. For that reason the architecture of the speculative builder, which faithfully reflected this confusion, was the only style which finally might claim to be the expression of the age in which we lived. Though there was a conflict which did exist between machinery and architecture, it could be exaggerated. We used many machine-made products without any sense of æsthetic loss. It was necessary to discriminate. In his opinion, the greater conflict was between architecture and the use of synthetic materials. In this connection controversy had centred round the use of reinforced concrete.

Concrete used in a subordinate way was a very useful material, but a concrete architecture was a different matter. Concrete was a transmitter of sound; concrete buildings were cold in winter and hot in summer; concrete gave rise to a great deal of condensation; concrete was very difficult to fix anything to. Reinforced concrete buildings were almost impossible to alter, and, once erected, the architect was helpless until he had obtained possession of the blue prints. In addition to this, concrete buildings were very costly to demolish; it took some 25 to 30 per cent. of the cost of erection to pull them down. Finally, the purpose for which most concrete buildings were built would probably change within the next generation and, as they could not be adapted to new ideas, it meant that the countryside would be covered with derelict buildings which were too expensive to remove.

We must resist all attempts to overthrow tradition and insist that tradition be interpreted in a more liberal spirit, while, simultaneously, any new ideas which met with our approval should be incorporated in tradition. Thus, by fusing new and old, we should effect a real growth and re-establish in our midst a new and common tradition.

Mr. F. E. Towndrow said when they saw the steel frame going up they realised how beautiful it was, but how different it was when they put on the horrible traditional stuff to clothe it. Some who had seen the modern work in its barest forms at first found it very difficult to like, but after a time it seemed to impress itself upon them in a very vivid way. It was extremely difficult for us to say at the moment whether there was any fundamental difference between architecture and engineering, but, personally, he did not believe there was. What he felt was that there must be a point in the future where the architect and the engineer would find that their aims did not conflict, but were similar.

Mr. F. Etchells said they were trying very painfully and seriously to produce architecture out of the people's needs.

Mr. Joseph Emberton said one would gather that an architect's job was the production of attractive-looking things, but his own contention was that it should be looked upon more as a practical piece of work He did not think, in the Gothic days, that people were concerned very much with the appearance of things, and one should realise that all those beautiful shapes and masses like flying buttresses and vaults were all there functioning just as the girder and stanchion were functioning to-day.

Capt. Buxton said the "steel men" had a definite tradition, which dated back to 1799, and he felt personally that the steel tradition was the tradition that was solving the modern difficulties.

Mr. John Gloag said we could not hope to get coherent architecture when 75 per cent. of the practising architects of to-day did not realise that a structural revolution was taking place while they were still hanging ridiculous garments of a past age on the buildings of the present.

After further debate it was unanimously agreed that the discussion should be adjourned and continued at a future meeting.

EDINBURGH ARCHITECTURAL ASSOCIATION

A LECTURE was recently given by Mr. William Davidson, F.R.I.B.A., on "The Psychology of Design," before the Associates' Section of the Edinburgh Architectural Association. The lecturer stated that design in all departments of human activity was a fundamental necessity in all civilised communities, and indeed had been largely practised among primitive peoples. Speaking of modern work in architecture, he maintained that the present crude attempts to produce something entirely new could not last in their baldest forms, for the human mind craved refinement and decorative arrangements, and sooner or later the new movement, with its tireless repetitions of commonplace geometric forms, would give place to more normal types.

Discussing modern functional domestic work of the extremist forms, the lecturer stated that it required no great skill to produce a house like a concrete pill-box with gun emplacements, or like a submarine with greenhouse sun-parlours, and it would be easy for the most cultured and confirmed traditionalist to produce such buildings if he believed it right or if it gave him any pleasure to do so. He considered that the modernist had seized on function and economy as arguments to support his case, which he was unable to defend on æsthetic grounds. In a decade or two these extreme examples would appear quaint and amusing, but would play little or no part in the real evolution of British architecture. They did not express the real spirit of the age, but only a brief passing phase of the minds of a minority.

He considered that the traditionalist had historic support for his point of view and practice. The traditionalist had learned the alphabet and grammar of his art without ignoring utility and function, and the present economic conditions would pass, and leave the designer untrammelled by over-hampering conditions. The British modernist seemed to have a horror of being inspired by anything traditional, but he was as keen on precedent as the traditionalist, only it must be modern and foreign. The modernist in architecture went to Sweden, Germany, Denmark, Holland, or Austria for his precedents; the sculptor to the primitives, Czecho-Slovakia, and Sweden; and the artist to Paris. He considered that art must continue to play an increasing part in the ordinary everyday life of the people if civilisation was to advance, and the Church must recognise that art was as essential to the mental and spiritual health of the community as any other form of human activity.

A CORRIDOR.

New Surgical Block, St. Bartholomew's Hospital, E.C.

MESSRS. LANCHESTER AND LODGE, FF.R.I.B.A., Architects.

ILLUSTRATIONS

PLATES.

Design for a Newspaper Office.

Many modern newspaper offices have been erected from the designs of Messrs. Ellis and Clarke, FF.R.I.B.A., of whose work in this kind we illustrate a further example this week.

Proposed Hotel, Singapore.

We illustrate a perspective drawing of a design for a proposed hotel at Singapore. Messrs. P. H. Keys and F. Dowdeswell, F. & A.R.I.B.A., are the architects.

St. Paul's Church, Bushey, Herts.

This new church is to serve the rapidly growing district between the mother church of Old Bushey and Watford, and will take the place of the present St. Paul's, which was built to Mr. Durst's design as a temporary measure in 1904. The east end of the new church is planned on a hexagonal basis, and the whole emphasis of the design is concentrated on the choir and sanctuary, the nave being very simple in character and lit principally from the west end. Externally the church is faced with flint and stone after the manner of the old local churches.

Mr. Austin Durst, M.A., F.R.I.B.A., is the architect.

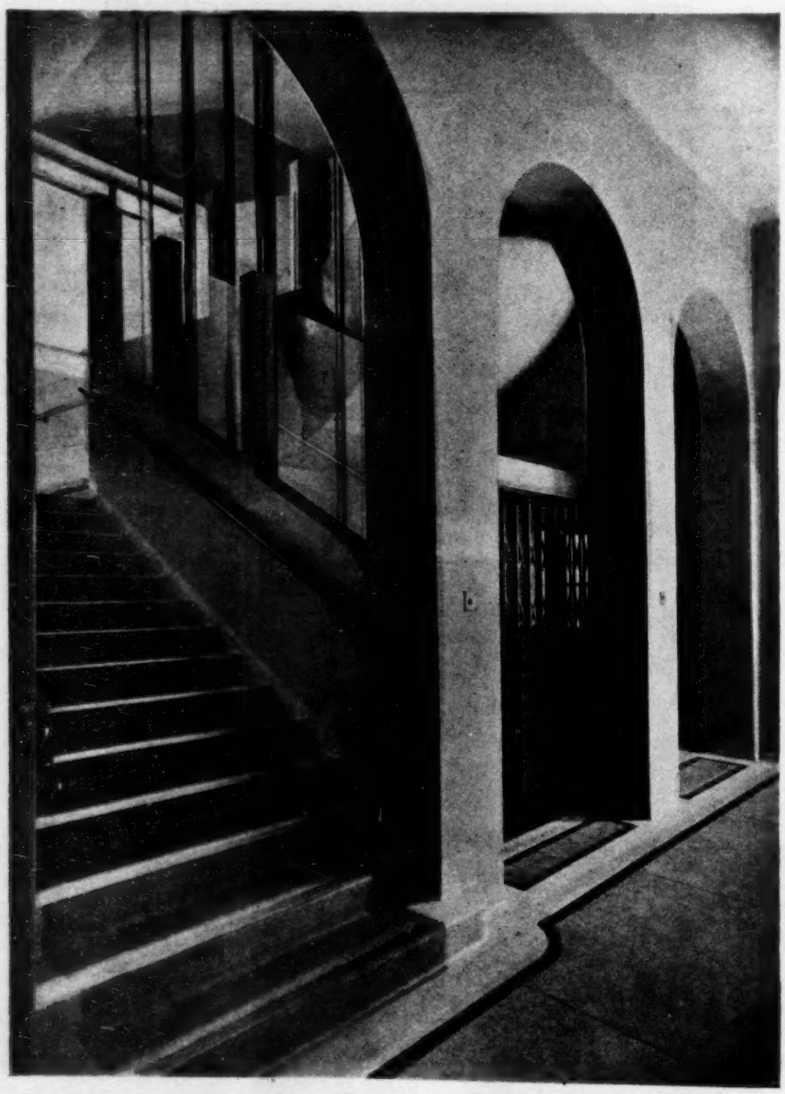
Whitefield Stand Grammar School for Girls, Lancs.

This school is shortly to be built in Higher-lane, for 400 girls. The following accommodation is provided:—Basement: heating chamber and fuel. Ground floor: assembly hall for 400, head mistress's room, assistant mistresses' room, secretary, library, senior girls' cloakroom, junior girls' cloakroom, lavatory, medical officer and rest room, gymnasium, changing room, domestic science room, kitchen, dining room for 114, 4 classrooms for 30 each, cycle shed and offices.

First floor: chemical laboratory, physics laboratory, science lecture room, preparation room and store, dark room, botany laboratory, art room, geography classroom, 6 classrooms for 30 each, 2 classrooms for 20 each, sixth form room, prefects' room.

The buildings are to be built of brick and faced with Accrington stock bricks with stone dressings, and the roofs covered with green slates. The floors are to be of fireproof construction. Ventilation will be by natural methods, the school being planned with a large central quadrangle, and all the rooms have efficient cross ventilation. The building will be heated by means of hot water pipes and radiators on the low-pressure system.

The plans have been prepared by Mr. Stephen Wilkinson, F.R.I.B.A., Preston, Architect to the Lancashire County Council.



THE MAIN STAIRCASE.

New Surgical Block, St. Bartholomew's Hospital, E.C.

MESSRS. LANCHESTER AND LODGE, FF.R.I.B.A., Architects.

New Surgical and Operation Blocks, St. Bartholomew's Hospital, E.C.

The buildings which have been erected comprise seven floors, and will accommodate 250 patients. Rooms are provided in the basement for the preparation of dressings, a general sterilising plant, instrument storage, with a repairer's shop attached, and an anæsthetic storage plant. An X-ray operation theatre, designed for performing manipulations under the rays has also been included.

The ground, first, second, third and fourth floors are similar in planning, each containing a ward unit, with its accompanying operation theatre unit. The fifth floor is given up to laboratories for the use of the professorial units. Above this is a solarium and a flat roof on to which the patients can be moved readily from the wards.

Each ward unit is divided into a male and female section. Each section consists of a large ward of twenty-two beds, a small ward of two beds, and a single-bedded ward. Each section has also its own ward kitchen, clean-sink room, dirty-sink room, urine-testing room, bathroom, lavatories, clothing store, linen room, and sisters' sitting room. In addition, serving both sections, there is a large demonstration room, a surgeons' room and a waiting room for the friends of the patients, who may be required to remain within the hospital precints in cases of serious illness. A special examination room is provided and is expected to be of great service. Adjoining this room is a smaller one for the personal use of the surgeon of the unit; there is an operation suite adjoining each ward unit. On the fifth floor are the Dunn laboratories for the use of the professorial units.

Under the theatre block is a suite of rooms for the preparation and sterilisation of the dressing rooms for the theatres and the rest of the hospital.

The heating of the building is by means of the panel system. The ventilation generally is by natural means, that is, by windows and fireplaces. The fireplaces are fitted with gas fires. The ventilation of the theatres is supplemented by a large fan which draws the air out by means of ducts to the roof.

The building has a steel frame cased with 14-inch brick walls and faced with purple Dorking brick. The internal partitions are built in hollow blocks. The floors and roofs are built of hollow blocks and reinforced concrete, being fire-resisting and sound-proof, and the roof is covered with asphalt. The floors of the wards are of teak, with a margin of terrazzo, the margin being raised to prevent beds being pushed against the walls. The floor of the sisters' sitting room and the small wards are also of teak. All the remaining floors are in terrazzo, with the exception of the small corridor immediately adjoining the entrance to the large wards; this corridor is in rubber and has a border of terrazzo, as in the large wards.

The walls generally are faced in Keene's cement, with an enamel finish, with the exception of the dado in certain rooms, such as the bathroom, clean- and dirty-sink rooms and lavatories, this dado being of light terrazzo with a black line at the top. The wall behind the sterilisers and at the back of the sinks is also finished in this way.

The doors generally are of the flush hospital type and are made of mahogany, finished with a brown tone to match the fire-resisting doors, these latter being made of teak. The doors across the corridors and also those to the large wards have one large glass panel glazed with fire-resisting wired glass and protected by three bronze bars on each side. The door frames are in deal, with the exception of those to the fire-resisting doors, which are in teak.

The cupboard doors are constructed with deal framing covered in 3-ply wood to give a flush face and are painted.

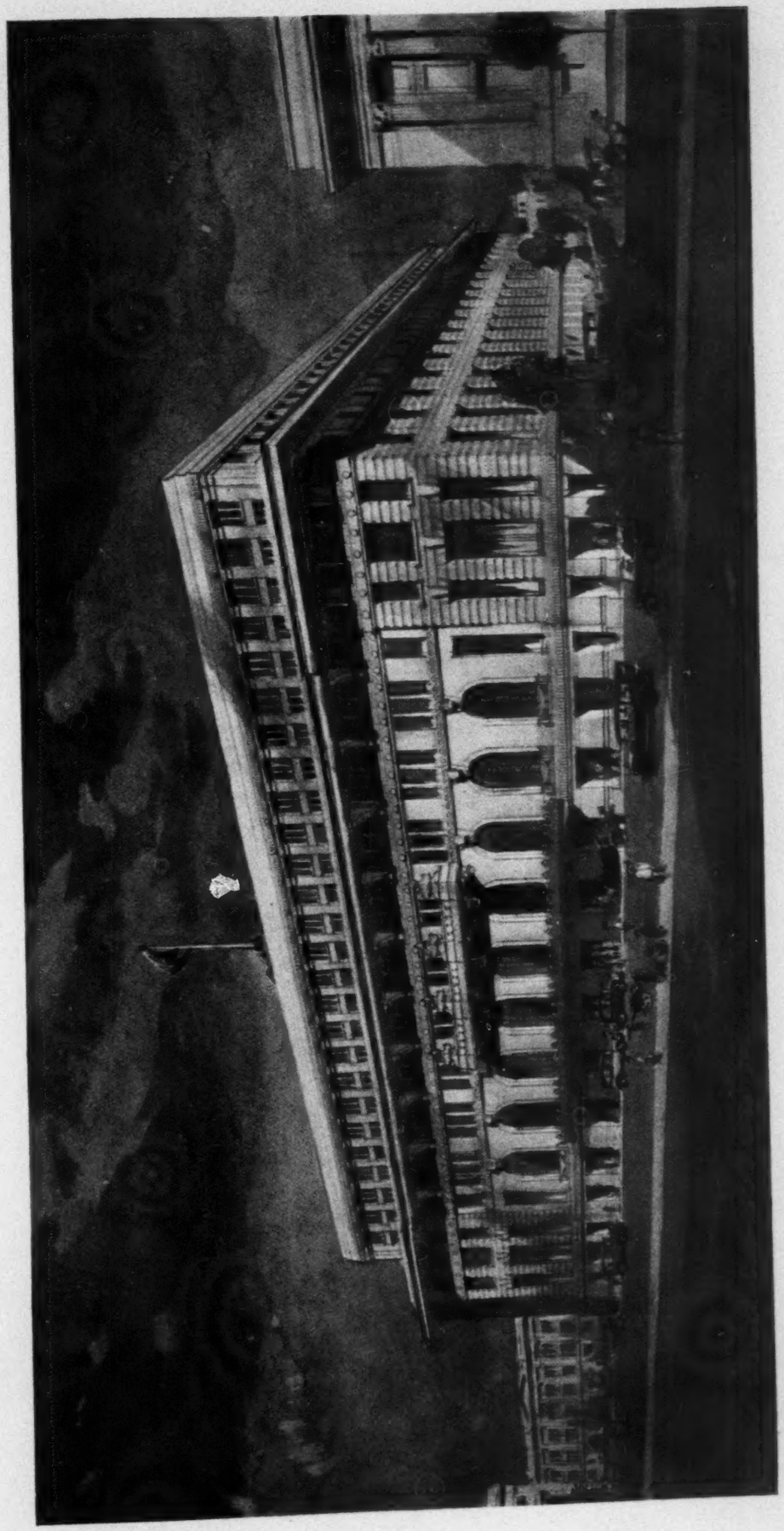
[A list of the contractors for this work is given on page 297.]

Coalville Municipal Offices Competition.

We illustrate this week the second premiated design in this competition, by Mr. Arthur J. Wood, F.R.I.B.A. The winning design, by Mr. Herbert Langman, F.R.I.B.A., was given in our last issue.

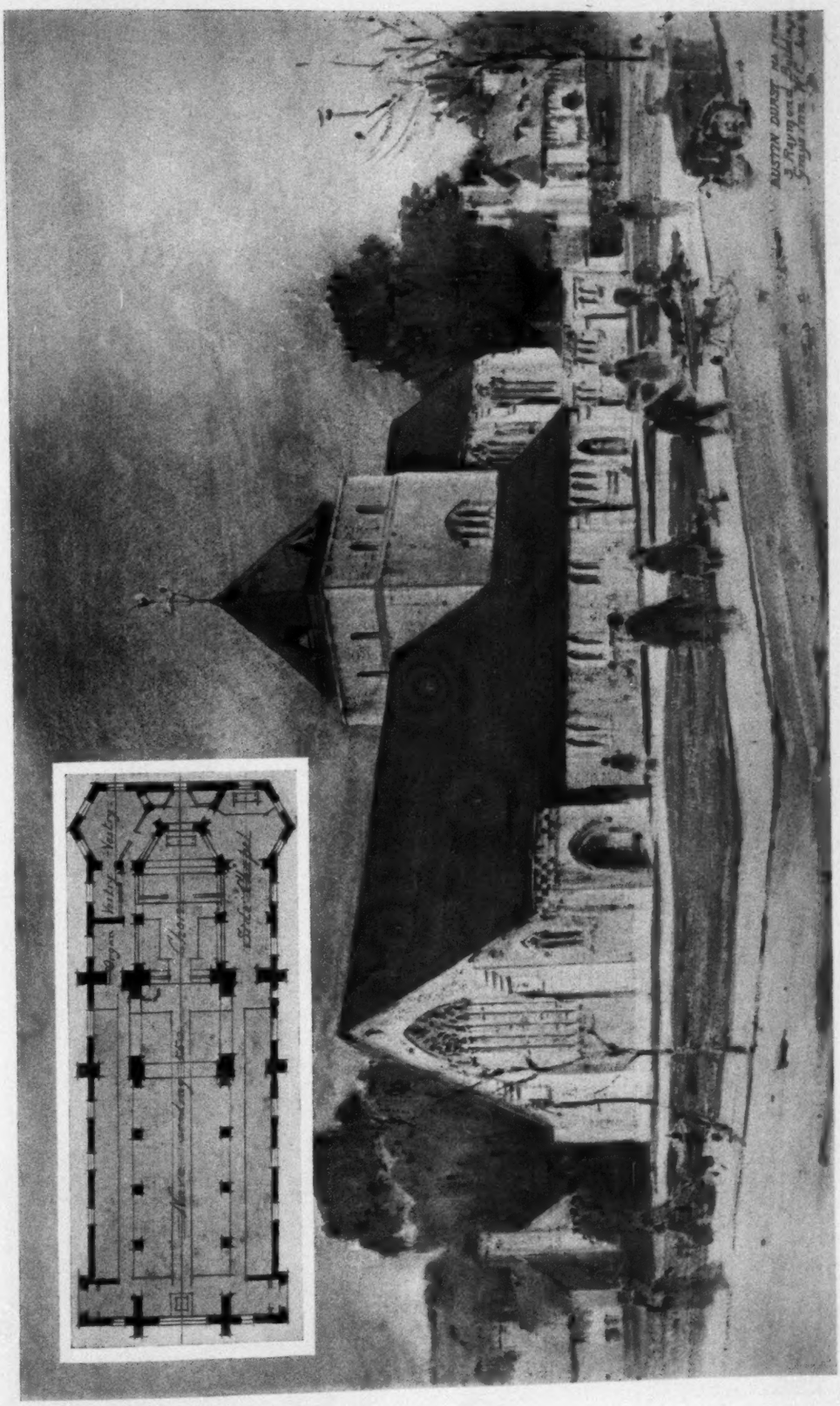
Design for a Newspaper Office.

MESSRS. ELLIS AND CLARKE, FF.R.I.B.A., Architects.



Proposed Hotel, Singapore.

Messrs. P. H. Keys and F. Dowdeswell, F. and A.R.I.B.A., Architects.



St. Paul's Church, Bushey, Herts.

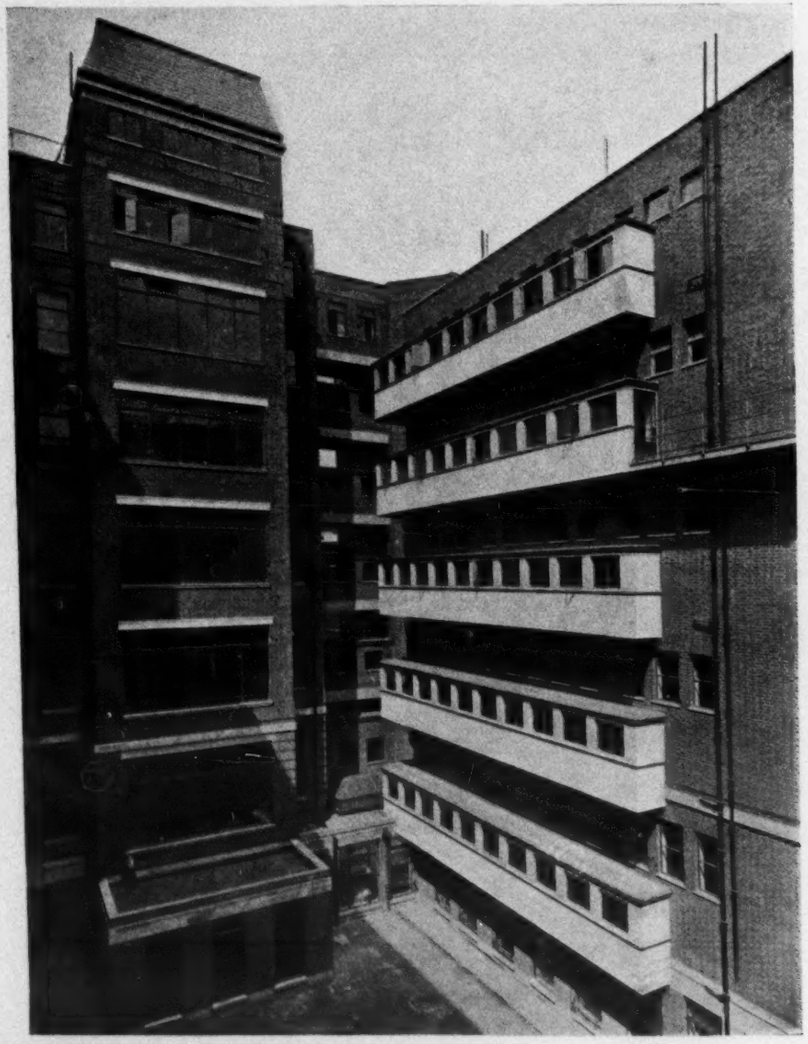
Mr. Austin Durst, M.A., F.R.I.B.A., Architect.

Proposed Grammar School for Girls, Whitefield Stand, Lancs.

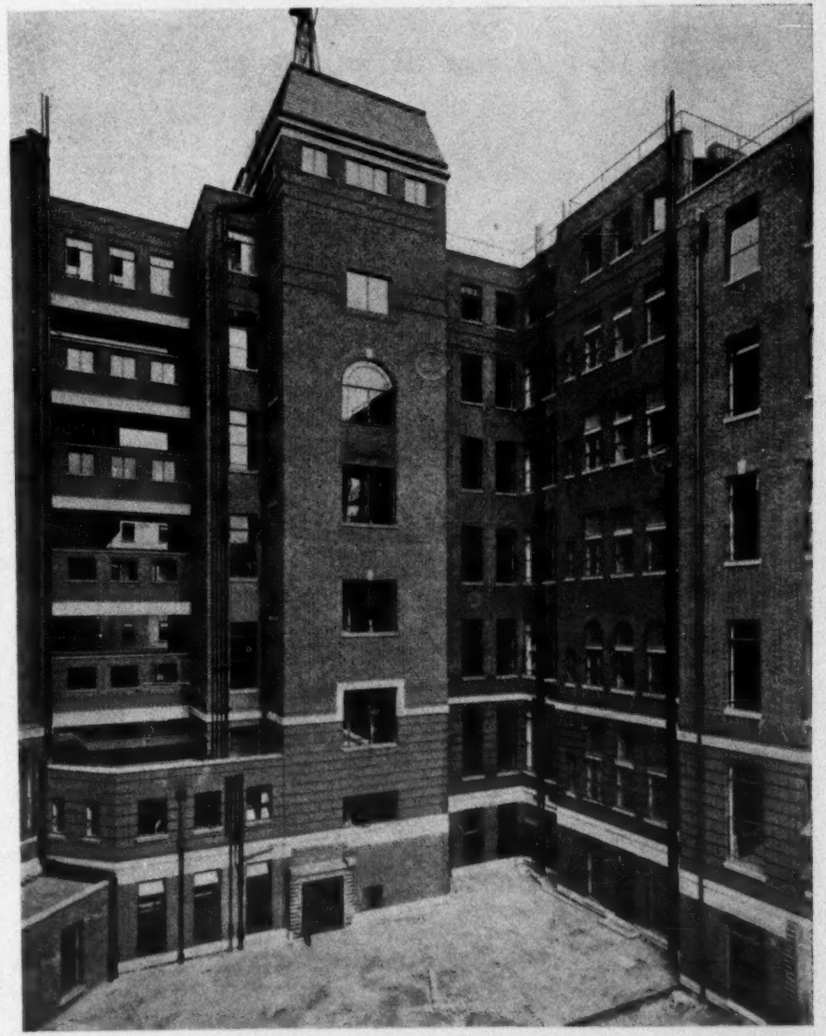
MR. STEPHEN WILKINSON, F.R.I.B.A., County Architect.

New Surgical Block, St. Bartholomew's Hospital, E.C.

MESSRS. LANCHESTER AND LODGE, FF.R.I.B.A., Architects.



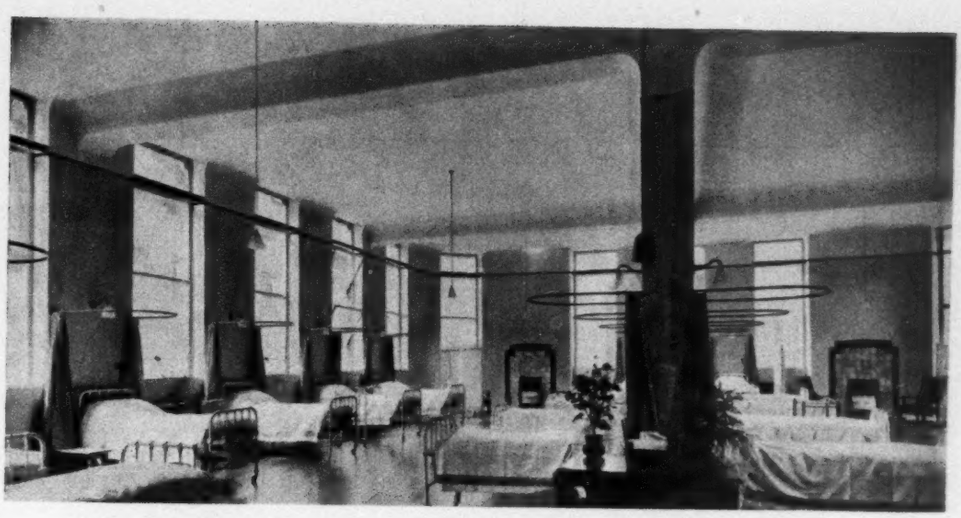
Exterior of Operation Block.



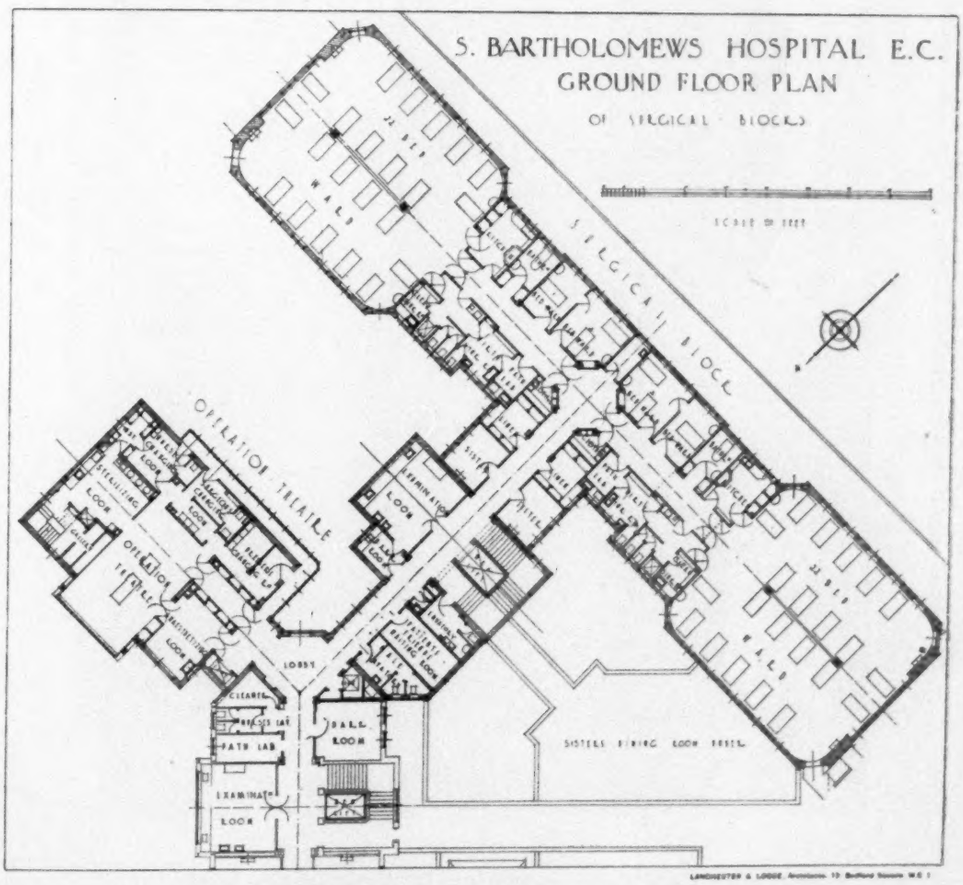
The Water Tower.

New Surgical and Operation Blocks, St. Bartholomew's Hospital, E.C.

Messrs. Lanchester and Lodge, FF.R.I.B.A., Architects.

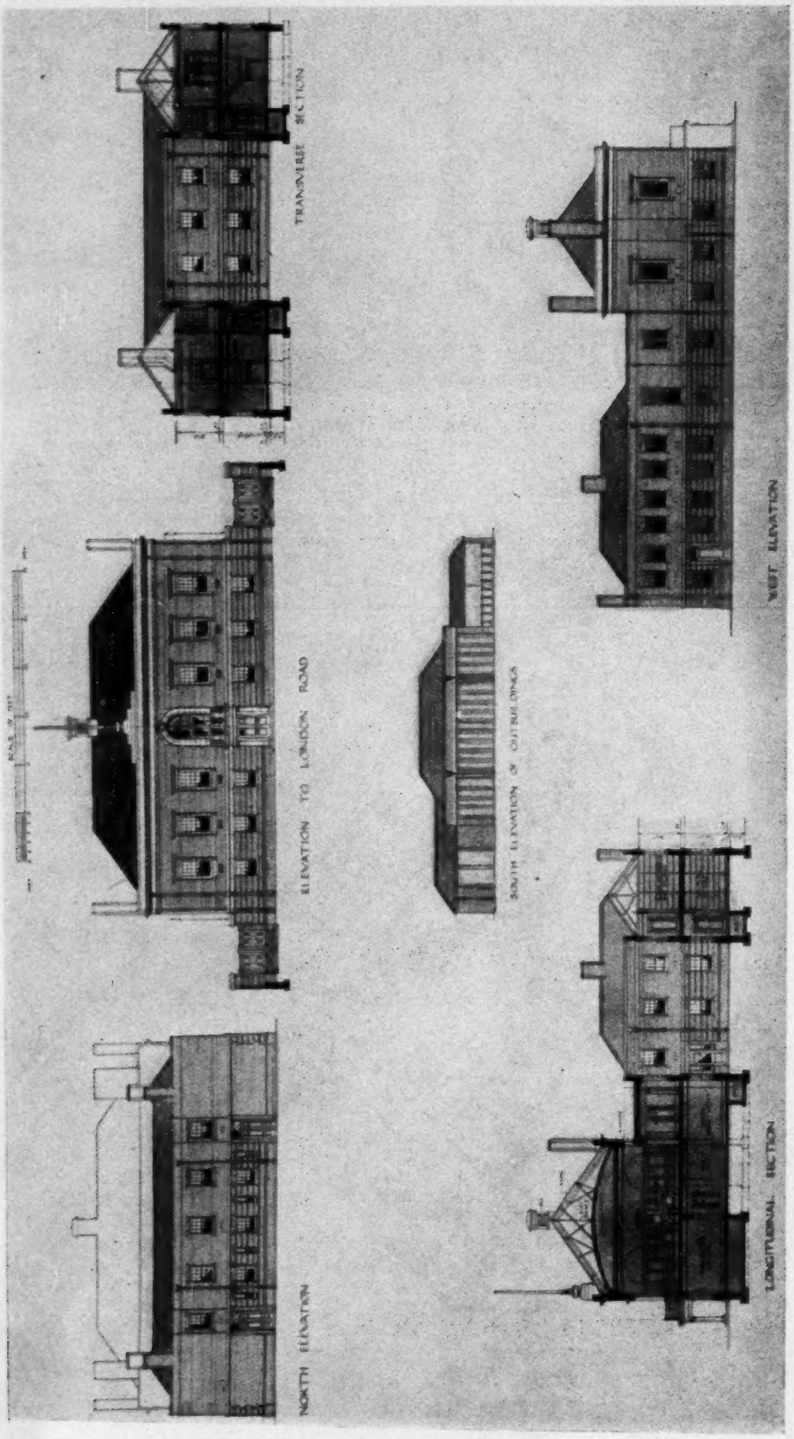


THE MAIN WARD.



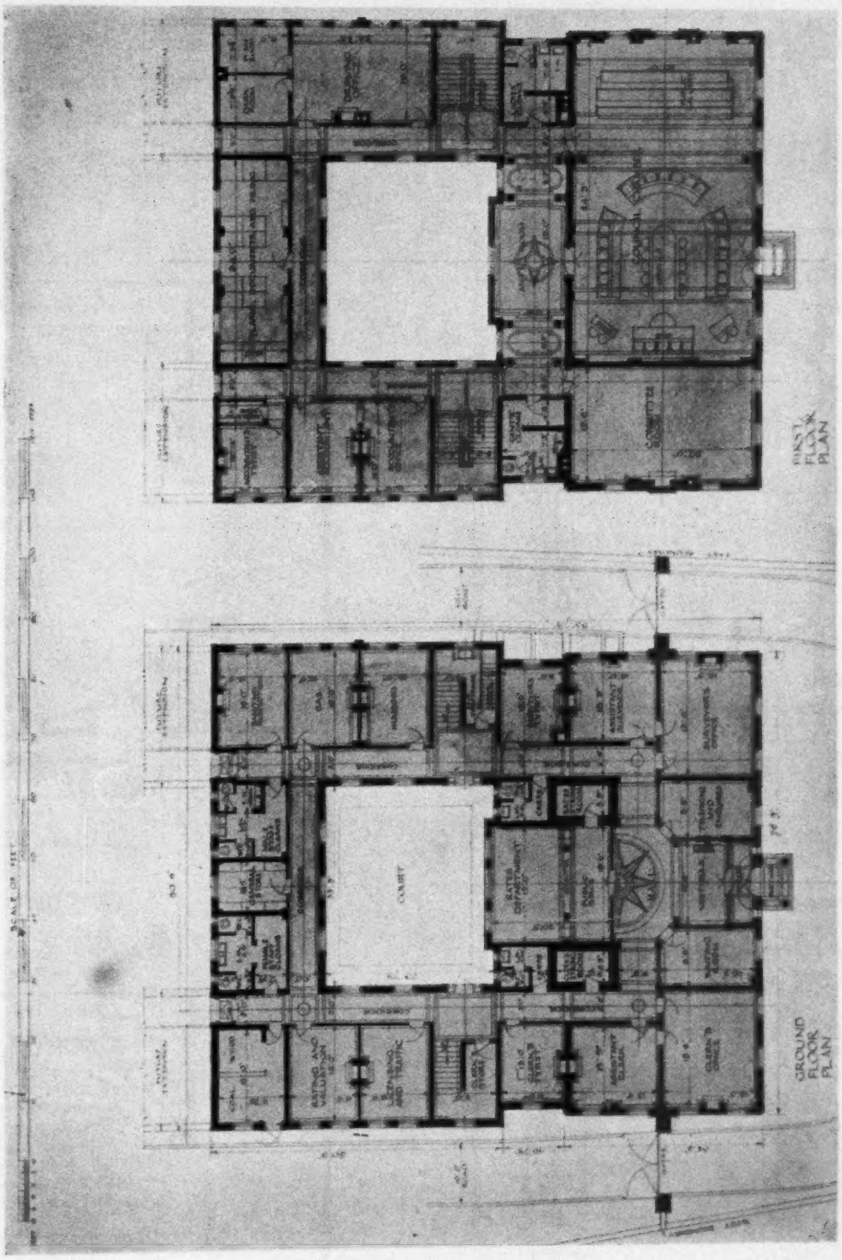
New Surgical and Operation Blocks, St. Bartholomew's Hospital, E.C.

MESSRS. LANCHESTER AND LODGE, FF.R.I.B.A., Architects.



Competition for New Municipal Buildings, Coalville, Leicestershire: Second Premiated Design.

By Mr. Arthur J. Wood, F.R.I.B.A.



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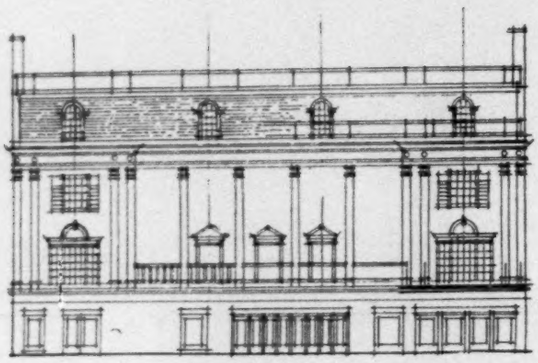
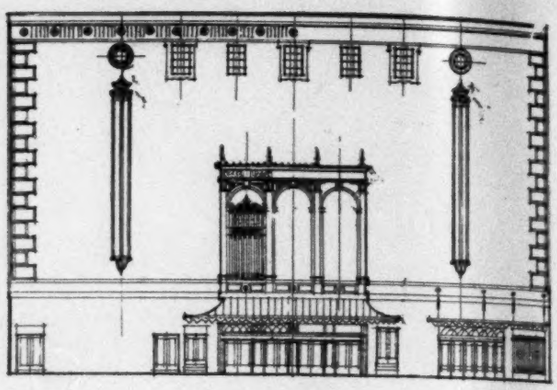


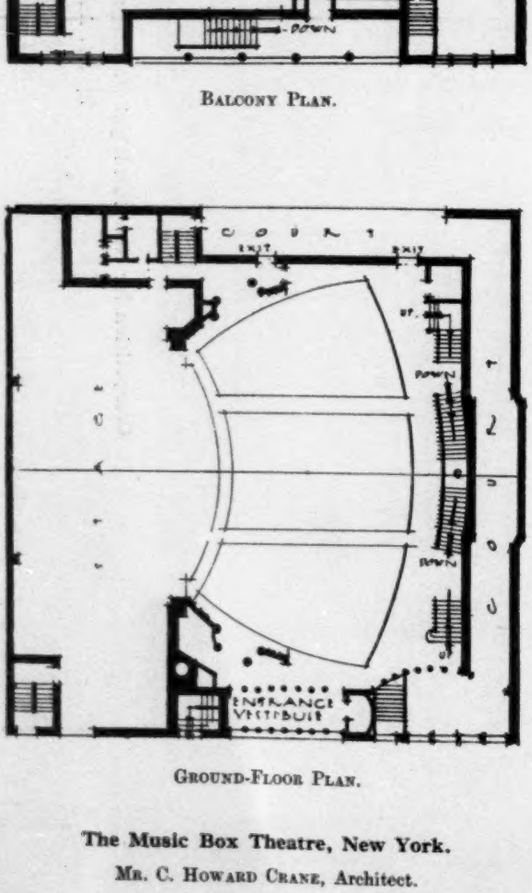
FRONT ELEVATION.



FRONT ELEVATION.

BALCONY PLAN.

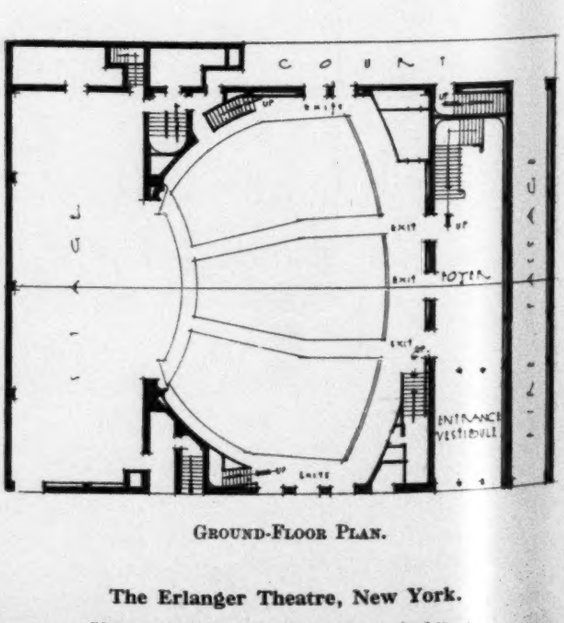
BALCONY PLAN.



GROUND-FLOOR PLAN.

The Music Box Theatre, New York.

MR. C. HOWARD CRANE, Architect.



GROUND-FLOOR PLAN.

The Erlanger Theatre, New York.

MESSRS. WARREN AND WETMORE, Architects.

THE ARCHITECTURE OF THE THEATRE IN AMERICA.—V

By E. WAMSLEY-LEWIS, A.R.I.B.A.

PLAN OF THE LEGITIMATE PLAY-HOUSE.

THERE being no pit in the American theatre, the planning of the building is greatly simplified. One of the greatest difficulties that the architect of the English theatre has to contend with is the planning of the main floor in two distinct portions, each with its own separate entrances and exits. It is for this reason that we so often find that the pit and stalls of a London theatre are below the level of the street. Usually the entrance to the pit is to the side of the street front with a small paybox and immediately a flight of stairs down to the back of the auditorium, whilst the main entrance, which is reserved exclusively for those paying for the higher-priced seats, has a foyer with booking offices, stairs up to the upper circle, entrances to the dress circle either direct or up or down a few stairs, and corridors outwards along the sides of the auditorium and outside it, with steps at the end of them leading down to the front of the stalls. The gallery of the English theatre, again, demands another distinct entrance and its own special sets of stairs, all of which take up a considerable amount of ground space and curtail the actual size of the auditorium.

EXIT STAIRS.—In democratic America all patrons enter the theatre by the same doors. In New York, mostly owing to the high value of the sites and consequent need for economical planning, there is practically no foyer at all in a great many of the smaller theatres—just a paybox immediately inside the entrance doors, either to the left or the right of a narrow vestibule, often not wider than five or six feet, then another range of doors entering directly into the auditorium. For access to the balcony there are stairways in the corners at the back of the house, but within the auditorium itself. In these houses the escape exits, necessarily demanded by the City Building Code, lead directly outside the building; those from the upper parts to iron escape stairs which hang outside the building, sometimes over the pavement, with the last section of stairs to the street to let down in case of emergency.

The best example of a treatment for these external stairways is that of the Erlenger Theatre in West Forty-Fourth-street by Messrs. Warren and Wetmore. Here they are contained in a sort of decorative casing of cast-iron, and only the last portion to the street goes down within the theatre. To enclose them outside the auditorium wall but behind the main street wall, with a screen such as in the Forty-Sixth-street Theatre, by Mr. Herbert J. Krapp, is satisfactory, but it considerably reduces the size of the auditorium. The most usual practice to-day is to place these outside stairways on the flank walls leading down to exit courts, where they do not obtrude over the important elevation or direct on to the street.

FOYER SPACE VESTIBULES.—The necessity for ample foyers in the ordinary American playhouse does not exist, for there is no social intercourse between acts. In Germany, where a visit to the theatre has a social importance, one meets one's friends in the rooms outside the auditorium as a necessary part of the evening programme. In England, something of the same thing happens, but only on first nights. In America, the theatregoer only leaves his seat between acts to go outside the building to enjoy cooler air or to smoke.

In the Arts and Community Theatres, where there is usually a flourishing club of enthusiastic people interested in the particular theatre which they support with their subscriptions, the foyer is of great importance. In the Guild Theatre, New York, by Mr. C. Howard Crane, there is a splendid lounge underneath the auditorium itself. In this position it absorbs no room that could otherwise be given up to seating, is accessible and quite comfortable. It is ventilated entirely artificially, and retiring rooms for ladies and gentlemen are placed on either side.

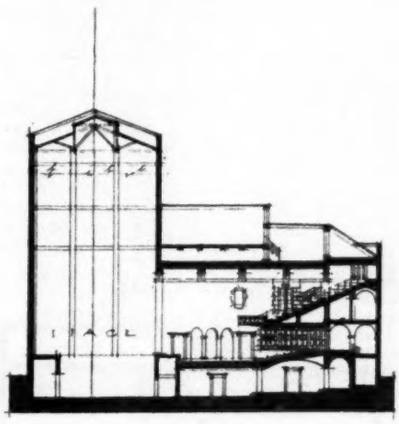
Bars and Buffets.

The American theatre does not provide for the service of drinks during intervals between the acts. There are usually no bars, buffets, or refreshment rooms, and this is not on account of prohibition, for there were none before the prohibition laws were passed. With the absence of long intervals in the programme, consequent upon the continuous performances of moving picture theatres and variety theatres, bars are not required and are not even found in English cinemas. Light refreshments are served in the lounge of the Guild Theatre from a little kitchen adjoining. Similar lounges and kitchens have been placed in the basements of the Little, the Music Box and Henry Miller's Theatres, all in New York.

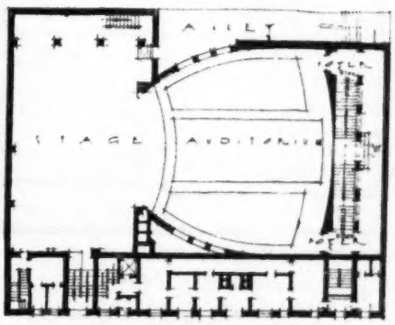
ICE WATER DRINKING-FOUNTAINS.—It is the custom to provide iced drinking-water fountains in all modern American theatres. These are often made very decorative features, in niches or on pedestals placed in the foyers, or at the back of the auditorium.

CLOAK ROOMS.—In the older American theatres, cloak rooms are either too small or inconvenient, or lacking entirely. In England it is seldom that adequate cloak room accommodation is provided, whilst in Germany the law demands that there shall be one metre counter space for cloaks for every twenty persons.

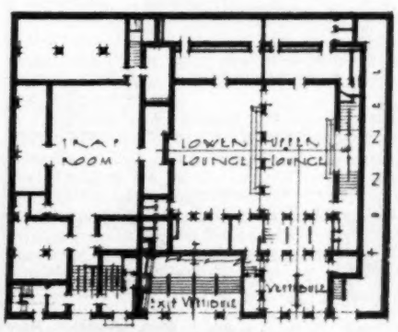
TOILETS.—The law merely asks that toilet accommodation be provided for each sex. This is most usually achieved by putting rooms with two closets and two lavatory basins in each, in a basement under the back of the stalls floor or the foyer.



LONGITUDINAL SECTION.



PLAN OF AUDITORIUM FLOOR.



GROUND-FLOOR PLAN.

The Theatre Guild Theatre, New York.

The Stage.

In the legitimate theatre, the least possible depth for a touring company to perform upon is twenty feet, with a proscenium thirty feet wide and eighteen to twenty feet high. In America, the owners of many city theatres find that their stages are not sufficiently big to take any form of production properly, because the builders have sacrificed the stage for the sake of extra seating space. Architects of new theatres are now giving more consideration for adequate stage space.

In the best American theatres the stage floor is built of wood in lateral sections resting on joists that run the width of the stage; when traps are needed in the floor they are easily obtained at any required point. Large stages, and those for spectacular shows, are fitted with stage lifts, one, two, or more in number, running across the stage the full width of the proscenium and raised by hydraulic jacks.

STAGE LIFTS.—The most spectacular feature at the Capitol, the stage lifts, are more intricate than those installed in any other picture theatre. Lift No. 1, which is downstage near the footlights, is in three sections, allowing it to be elevated as a single platform to a height of 8 ft. 6 in. above stage level, or each of its three sections lifted individually. Thus, it may be used to gain a step effect, or an elevated platform across the stage from wing to wing. No. 2 lift, which is nearer the back wall, is a double-decker, with 8 ft. 6 in. clear headroom between the two levels. Each of the two platforms is tracked to accommodate the electric cars, permitting an almost unlimited number of formations by means of various combinations employing two or more of these devices. The bridge is mounted on rollers and set on steel tracks running up and down stage, which are wide enough apart to permit the bridge being moved forwards or backwards over the electric cars.

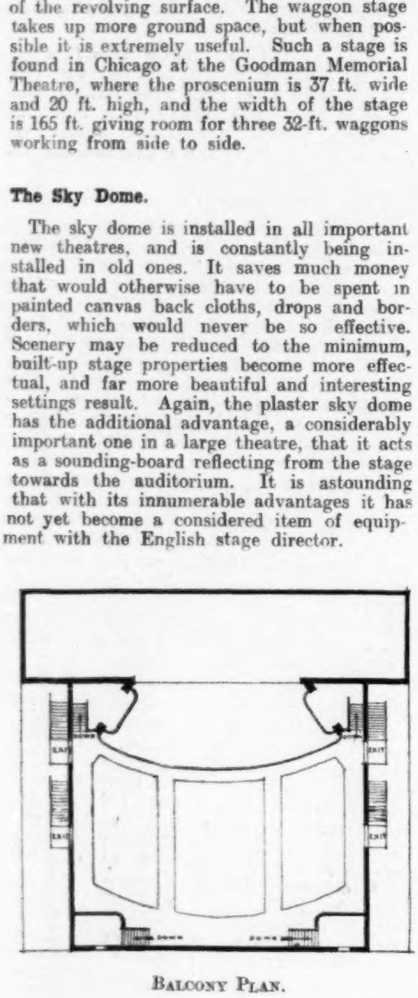
Below the stage there is a parking space for the cars, so that a scene may be set below stage on what is known as the automat, and the car then rolled on to the lower level of No. 2 lift, and then elevated to the stage level. One of the cars is in two sections, so that it may be rolled forward or backward, and at certain points on the stage split into two equal sections, which may be moved in opposite directions up or down stage or toward the wings. All these devices, stage lifts, orchestra pit, and automats are electrically operated from a switch in the wings. The operation is very simple. There are separate buttons for the various elevations required, and the speed at which they shall move can be regulated.

The tracks for the automats do not spoil the floor for use as a dancing space. They are designed with a very small groove cut in the centre of flat steel strips, the flanges of which are set perfectly flush with the floor surface.

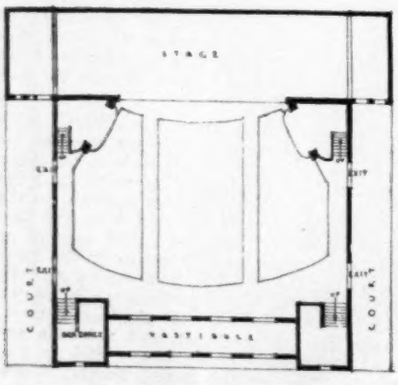
THE REVOLVING STAGE.—Several theatres—among the large ones the New Century and the Hippodrome, and the small theatres, the Little, all in New York—have been equipped with revolving stages, an invention of the German Herr Lautenschlager. Its purpose is to move, without long intervals, built-up scenery and stage props heavier than can be handled by one or two men. In the case of a small stage, such as the Little Theatre, which has a turntable only 35 ft. in diameter, it is an unpractical adjunct, for it is inadequate for many settings, which themselves each only take up a portion of the revolving surface. The waggon stage takes up more ground space, but when possible it is extremely useful. Such a stage is found in Chicago at the Goodman Memorial Theatre, where the proscenium is 37 ft. wide and 20 ft. high, and the width of the stage is 165 ft. giving room for three 32-ft. waggons working from side to side.

The Sky Dome.

The sky dome is installed in all important new theatres, and is constantly being installed in old ones. It saves much money that would otherwise have to be spent in painted canvas back cloths, drops and borders, which would never be so effective. Scenery may be reduced to the minimum, built-up stage properties become more effectual, and far more beautiful and interesting settings result. Again, the plaster sky dome has the additional advantage, a considerably important one in a large theatre, that it acts as a sounding-board reflecting from the stage towards the auditorium. It is astounding that with its innumerable advantages it has not yet become a considered item of equipment with the English stage director.

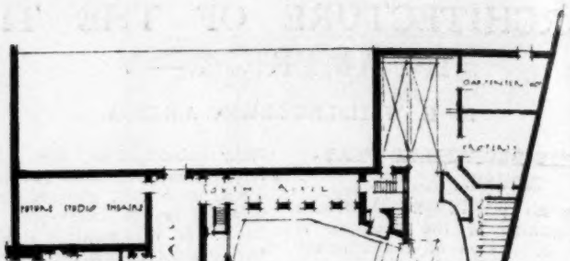


BALCONY PLAN.



ORCHESTRA FLOOR PLAN.

The Playhouse, New York.



GROUND-FLOOR PLAN.

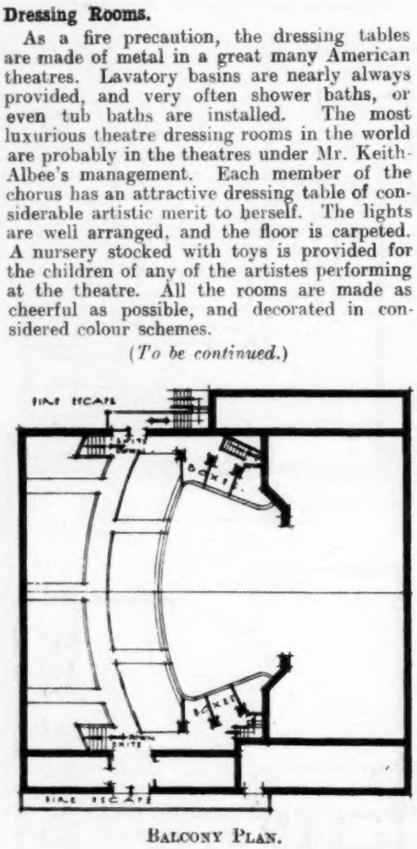
The Goodman Memorial Theatre, Chicago.

[This theatre is equipped with a waggon stage and sky dome.]

Dressing Rooms.

As a fire precaution, the dressing tables are made of metal in a great many American theatres. Lavatory basins are nearly always provided, and very often shower baths, or even tub baths are installed. The most luxurious theatre dressing rooms in the world are probably in the theatres under Mr. Keith-Albee's management. Each member of the chorus has an attractive dressing table of considerable artistic merit to herself. The lights are well arranged, and the floor is carpeted. A nursery stocked with toys is provided for the children of any of the artistes performing at the theatre. All the rooms are made as cheerful as possible, and decorated in considered colour schemes.

(To be continued.)



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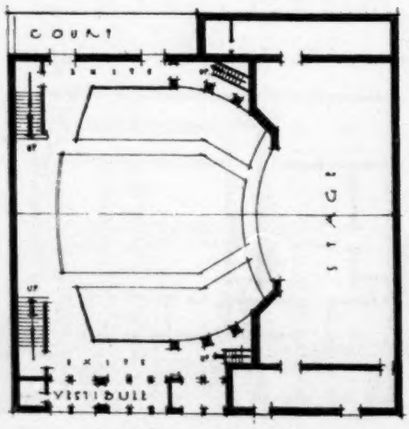


GROUND-FLOOR PLAN.

The Forest Theatre, New York.

L.C.C. SURVEY OF LONDON*

THE thirteenth volume of the Survey of London is devoted to "The Parish of St. Margaret, Westminster—Part II. (Neighbourhood of Whitehall, Vol. I.)," and has been prepared by Sir Montagu H. Cox, LL.B. (Lond.), Clerk to the L.C.C., and Mr. G. Topham Forrest, F.R.I.B.A., Architect to the Council. Apart from the valuable and interesting as well as exhaustive descriptive matter, the great interest of the volume centres on the illustrations and descriptions of the Palace of Whitehall. It is perhaps difficult now to realise the full significance of the Palace of Whitehall, which includes the notable Banqueting Hall. Sorbière came to England about 1665, and his impressions are left on record. He says the Banqueting Hall looked very stately, but the last of the Palace was a heap of houses ill-built. Later on the general appearance may have improved, and, though the general effect was that of an ill-assorted, incongruous mass of buildings of differing styles and dates, it must assuredly have held some striking interest. With the large amount of information collected in this London Survey and multitude of illustrations we can form a very complete and vivid picture of the Banqueting Hall. There is really a vast amount of interest in the records here collected, and we have admirable illustrations of Whitehall Garden, Pembroke House, Gwydyr House, Malmesbury House, Cromwell House, Horse Guards Avenue, Cadogan House, and Pelham House. That London still possesses a series of fine houses in this locality is well realised by the wealth of material collected in the volume before us. The Rubens ceiling, with all its varying conditions of unsatisfactory upkeep, is well described. But the whole result of these varied adjuncts to a palace is somewhat lamentable, and one feels that there might have been more co-ordination of effort in all the varied phases through which this wonderful Crown property has passed. We can promise our readers a great deal of interest in following the history of these seventeenth and eighteenth century relics of a time when the Crown was ever ready to bestow comfortable housing on those who had served it well, either in State services or as the rewards of profligacy. The volume has been admirably produced by Messrs. B. T. Batsford, Ltd., for the L.C.C., and is a worthy successor to the previous volumes of the Survey.

* London County Council Survey of London. Issued by the Joint Publishing Committee representing the L.C.C. and the London Survey Committee, under the general editorship of Montagu H. Cox (for the Council) and Philip Norman (for the Survey Committee). Volume XIII: The Parish of St. Margaret, Westminster.

MODERN CHURCH BUILDING

By W. R. LETHABY.

In attempting to open up a view as to what are and what might be our aims in modern church building I am most anxious not to overstate or be in any way annoying, but, of course, one must try to be explanatory. I also wish to speak with the greatest respect of the devoted work which was done in what was called "the Revived Gothic Style," and to express reverence for masters like Butterfield, Brooks, and Street, who explored the possibilities and *the impossibilities* of the programme. These men, however, were all of an earlier generation, and it had not become clear in their day that mediæval art could belong to the Middle Ages alone. The teaching of Strzygowski, Spengler* and others on the content of the art had not then been absorbed.

All ancient architecture was carried on by changing custom. It was a development of the folk mind in the medium of building, it was social, epic, and deep. True architecture was not a professional exercise in a style. The conception of styles as cunning concoctions of appearances is indeed one of the main dead roots of the withered tree of architecture. Style names, of course, are labels used for museum purposes; as we conceive them they are only different ways of being dead.

The wonderful and romantic art of the past which we suppose we capture in our descriptions, and neatly label "Gothic Architecture," was seen by the creators with quite other eyes than ours. It was the builded exposition of the heart of the same people who sang the forest ballads. It was northern and formed by pre-Chaucerian man working out in stone the forest mind; it was a sort of Robin Hood art. Earlier modern observers indeed saw this, but they made too rigid a theory of actual conscious imitation from the avenues of the woods. There may have been nothing, or very little, that was conscious in it but just a showing through of the forest-formed mentality, but that mentality was the field which produced the fruit. Shakespeare inherited something of woodland romance, but we have moved outside that world.

In the mediæval epoch, of course, there was growth of power and increase of skill, but the mind and spirit which selected and guided the direction of the development of Gothic art were more than the mechanisms which were explored. I have tried to deal with the mental impulse of Gothic art in a chapter in the *Legacy of the Middle Ages*.

We have now learnt so well in text-books and glossaries all about clerestory and triforium, tracery and pinnacles, in the category of shapes; also of Early-English, Decorated, and Perpendicular in the order of time, that it seems to be supposed by many easy thinkers that we may be mediæval ourselves. Only to very few, perhaps, does it occur that we might be Late Egyptian or Early Christian by similar concentration on the study of appearances and the same exquisite ability in make-believing. Why not Early Christian indeed? I venture to say that this "style," as we call it, is far more universal, that is, far more truly modern, than are our correct or sprightly essays in looking like early, middle and late, pointed. Why might not Leeds or Birmingham give us a catacomb cathedral?

Great confusion is created by our use of style words, such as "Gothic," to describe at one time facts of essence and history, and at another only shapes and appearances. For this ambiguous and betraying word "Gothic" we should frankly substitute mediæval and sham-mediæval We cannot really be Gothic out of due time. Thus, I am told in a letter from America of a grand new "Gothic" cathedral now building in San Francisco:—"the great steel structure is already thrown up against the sky."

This, however, I think may be better than many of the amazingly skilful things we get done here. For example, a month or two ago I saw in an ancient church some new screen work, which was clever to a miracle. It was of what we call in make-believe language "late character"; very elaborate in design and minute in execution, it had in the ornamentation subtle touches as of the coming Renaissance "style." It looked for all the world as if it must have been done in the year 1527. Is that a right aim in national art: does it mean life or decay? If these questions were mere matters of taste—as the dear puzzled workmen say, "some likes one thing and some likes another," I would not trouble you, but to me the outlook is profoundly disquieting, and I am venturing to tell of my fright.

A few absolute copies of ancient works of art might be justified in several ways. While we still know all the evidence, it would be very instructive and truly touching to reconstruct, where a small chapel may be required, the little fourth century church of Silchester; or where a bigger thing is wanted the dignified basilican church of Brixworth. If the wonderful seventh century cross shaft at Bewcastle had been accurately *copied* ten, twenty or thirty years ago, such a record would have a definite historical value. The copy would have been something quite different from the hundreds, indeed thousands, of costly "Runic, Celtic and Saxon" crosses, so-called, with which our churchyards and cathedral closes are becoming infested—irritating annoyances.

Our great mistake as architects and employers has been over-interest in the outward forms and ceremonies of art, forgetting that here, too, the letter killeth and life is of the spirit. In a book by an able French churchman on "Thought," which I have just been reading, he points out in regard to literature that the "imitation of external qualities is detrimental to real creativeness." And I am of the same mind in regard to building. This sort of thing persisted in too long must be a factor in national decadence. We have to aim at realities which bring forth living art, and not at reproducing the outward appearances of the arts of the past. One of the deep mistakes of this age is the supposition that art is surface appearance and not the essence, the soul of the substance. On this I must quote a word from William Morris: "I warn you against supposing, you who may specially love art, that you will do any good by attempting to revivify art by dealing with its dead exterior. I say it is the *aims of art* that you must seek rather than the *art itself*; and in that search we may find ourselves in a world blank and bare, as the result of our caring at least this much for art, that we will not endure the shams of it."

From the mistake that Mediæval might be equated with an ambiguous middle term "Gothic," which should mean not something which once existed in time, but mere outward shapes and appearances, sprang all the horrors of falsification which we have called "restoration." If we could do Gothic so beautfully, why not add new 13th, 14th and 15th century work to our poor old cathedrals? Still another resultant of the misconception has been the isolation of church builders from living sculpture, painting and other forms of contemporary art.

We have to put general ideas in place of the style conception of church building, and then carefully but adventurously work out the implications of such ideas—*leading* ideas. Art is not a mummery, but rather vital human workmanship. At some time or other in the immediate or remote future, if the world lasts so long, some essential general principles for modern church-building must be agreed on as foundational. Then, in considering and working out these, a slow movement away from style designing would be initiated. All talk of substituting another "style" is vain. The style approach is itself the way that leads to destruction. The principles which we require must be general ideas which might be understood by any workman; they must be entirely free of the jargon of art criticism.

It is now, I suppose, about a hundred years ago that Pugin was writing on "the true principles" of architecture, leading up to the conclusion that we must pretend to be mediæval. Now we want another statement deduced from a wider area of observation. It is true I think that at the present time we have a few ideas beyond style conceptions. These in the main are taste and ostentation. This grandeur complex is to be interpreted with great skill by very clever men at doing it Something like this is the background of our present-day architecture—style plus ostentation. While we are building churches called "Gothic" out of due time, the great business stores, those cathedrals of shopping women, are being erected in what is called "Classic." Here the method of ostentation is to arrange scores of great pillars to create a look of haughty extravagance, but this columnar style is only another variety of make-believe. In commerce, however, it is said to pay, it is a method of advertisement, and I fear it will be very difficult to bring out idealist arguments which will be convincing to that psychology. With church builders it ought to be different

The first principle, I suppose we might all agree, should be to attempt to develop suitable building types; and beyond that to aim at structural perfection. This, indeed, is so obvious in words that we might pass it over as taken for granted. But is the idea of Perfect Structure clearly realised by anyone? Take the practical test of repairs. A way of church building must be entered on, which will consider from the first the distressing facts of dilapidation and decay. To eliminate repair, I would make a chief datum in all rational building programmes. I return to this point in a minute; in the meantime I wish to suggest that such an ideal of perfect structure for given purposes and especially such a dignified purpose as a church should carry us very far indeed.

Our churches, as now existing by custom, are large and long halls divided into two main parts. They are constructed with walls, pillars, arches and big stone windows. If we would thus think of a church, in general terms, as a long hall of arched construction, we might then proceed to see how the best solutions for particular cases could be obtained—organic, energetic, economic. Then we might even conceive of what we call "tracery" as a general problem of subdividing big windows, and something living, intelligible and really elegant might be developed in place of our anxious and absurd imitations of the style of early fourteenth-century York masons. The best modern traceried windows I know are the iron ones in the flank of Waterloo Station. The idea of *structure* which I want to suggest is something developing, formative, organic. Not a putting together of pre-conceived art-designs as we now conceive "construction," but an outcome, an outgrowth, of all the conditions seen in a fine human way; organic structures with the thrusts and resistances exactly in proper relation, perfect solutions properly finished. I have come to these conclusions not by any scientific inclinations, but by the study of ancient arts. If I could believe in it I could rattle off competition designs for cathedrals duly mystical, symbolic and full of "atmosphere." I see one now, seven-spired, the upper third of each gilt to catch the sun, and all surmounted by archangels, with long trumpets sweetly calling to the services (by attachment to the powerful organ machine); the greatest central archangel should reserve his trump. With a verbally attractive report on composition and massing, proportion and leading lines, "feeling and atmosphere," this design might stand a chance of being a winner.

The question of repairs, which I mentioned before, is quite alarming; I wonder if any statistics of annual charges exist. During the last year the tall spires of two Victorian very-Gothic churches nearest where I live have had costly scaffoldings around them. Every-

* *Origins of Church Art*, and *Decline of the West*.

where I observe on such buildings crockets and finials fallen, and decay getting hold of the stone. And this brings me to another point which I must just mention, however shocking it may seem. All stone churches in the atmospheric conditions of England, especially in our smoky cities, should be limewashed directly on completion and periodically afterwards. Unprotected soft stone begins to decay at once, and the charge that steadily accrues from the neglect of this traditional precaution is beyond computation. I know that people hastily say that they would not like it. It does not sound grand and all that. Once I thought so myself, but now a soft stone building left in the wet without an overcoat makes me shiver—it is so cruel.

The idea or principle of economy is part of the structural ideal. At the first thought economy is distasteful, it suggests cheapness and insufficiency. But in its essence it is a great positive guide. Economy is part of perfection: the attaining of the greatest possible result within limits. Economy is the art of maximum service. I sometimes think, though it may be contradictory, that economy is desirable even if it cost more in money.

Another principle should be the provision of sufficient light. Last mid-summer I noted that a costly modern London church near my house was lighted for congregational use at noon. At noon in June! Is that reasonable or right? A phrase by Milton about "dim religious light" has probably brought the gas and electric light companies much custom; but is it desirable in our growing poverty that this unnecessary consumption and waste shall be continued? It has even been suggested to me by a higher critic of Milton's text that several passages seem to indicate a special sensitiveness to light, and as we all know he was overtaken by blindness. It is sometimes supposed that mediæval churches were dark. The early Norman buildings were so indeed, but the whole mediæval church building movement might truly be said to be towards light and more light. In the romances, walls of glass appear as one of the ideals of the late Middle Ages. Together with daylight, and even occasional sunlight, in our churches, I would also mention general cleanliness, order, fairness. Recently in Cornwall I saw a rough old church so well scrubbed and cared for that instinctively one felt: This is sacred indeed.

We have passed into a time when all the larger matters of structure are executed by mass labour which soon is to be further "rationalised," as they call it. This being so, it is clear that another church building principle should be something like this. In all work which we regard as "decorative or ornamental," concentration for higher quality is a better aim than distributed commercial richness. For one thing high-quality work trains high-quality men. Here again two paths open before us. Cannot we give up this low-level routine richness in mouldings, tracery, cusps, pinnacles, crockets, finials, and all the rest of the tawdry, for something, however small, of high human quality—a true work of art? Shall we make richness or reality our objective? A profusion of intricate deeply cut mouldings was delightful when the ancient masons were first eagerly exploring the possibilities of working in stone. Now, however, we have to consider whether modern imitations of these things are not silly, wearisome and repulsive. All our office-supplied patterns for traceried windows, screens, reredoses and the like have to be reconsidered in the same way. We have so far as possible to substitute personal human work for manufactured richness. The smile of beauty springs from human expression rather than by looking expensive. As much work as possible must be taken out of the slavery department and an equivalent done at a higher level of production.

In all forms of sculpture and painting, including stained glass, this thought of quality in place of quantity must be our guide. Preciousness is a chief element in the appeal of stained glass: vulgarising it is against its very essence. Poor stuff is worse than nothing, and minus quantities have to be recognised in art. We must seek higher levels of thinking and doing, and thus set up a tradition of development. All "decorations" (as we call them) have to be produced in a human way by men who have something to say from their hearts: only thus may sincerity and poetry be reached. This is true to some extent even in the mass constructions, if they be generally intelligible or the reverse, but it is greatly more true of the higher, or what might be the higher, modes of craftsmanship.

In all the costly efforts made during a century of modern church building, it is difficult to think of any works of art being requisitioned. During this time we have had many skilful and deep-thinking painters—Madox Brown, Holman Hunt, G. F. Watts, but I do not know of their being employed in paintings for churches. What Madox Brown might have done on a church wall may be seen in his great civic series at Manchester. The noble painting that was available even eight or ten years ago is shown by Mr. Cayley Robinson's frescoes in the entrance hall of the Middlesex Hospital: now he is dead.

The character of our current picture exhibitions is in large part a consequence of there being little or no demand for pictorial work for serious purposes. We train thousands of artists, and then leave them to despair and the mad effort to be talked about. Is it to be wondered at that we get angry compositions in purple and emerald green? If the English Church and other educational bodies would demand work expressive of full humanity, we may not doubt that it would be forthcoming. If only a few paintings were commissioned every year or bought from the exhibitions, many would be produced and an avenue of thought and practice opened out. Even a two-guinea water-colour of green fields or corn-sheaves, which was true and touching, hung in a city church, would be more healing and helpful than a million fleurs-de-lis and rosettes.

Similarly in regard to sculpture, with the exception of a few memorials which have been provided by external means and then placed in churches, I cannot think of any ecclesiastical sculpture, which can rank as a work of art with a soul of its own. Might not some fund be established for collecting works of vital art to be distributed to churches?

It is only by living change and adaptation to our age that the spirt of beauty may be preserved in our churches. One other less worthy reason why a change should be made in our direction is this. America at the present moment is interested in rearing several large sham-Gothic cathedrals, but it can hardly be believed that this fashion will there long be maintained. Soon probably the Americans will be boldly experimenting in building modern churches, and then we shall doubtless be as ready to copy their results in this sphere as in others. Would it not be better to develop our own thinking than to wait until there is something to copy?

If what I have tried to say were a question of choice between more or less equivalent alternatives in the field of taste, I should hardly have worried the reader in this way. I do not, however, so conceive it. This is a question of enormous human implications involving the supply for what must be a very large economic demand. I wonder what the annual sum spent in church building and "ornamentation" amounts to? This sum, whatever it may be, is a demand for labour of certain kinds and standards. It compels service to that amount; it is making men of a certain type; it is moulding thought and forming civilisation. Large spending is a great responsibility.

To try to summarise: We must think of our church buildings in terms generally understandable, not in mysterious art-language.

All attempts to substitute one "style" for another would be mistaken. It is the style conception which is itself the enemy.

We should endeavour to reach agreement on such principles as I have discussed.

Then on the existing basis of current practice we should slowly modify our efforts.

"THE BUILDER" DEBATE

XXXVI.—ARCHITECTURE AND PUBLICITY.

SIR,—I should have found it a difficult matter to take sides in a debate upon the advisability or otherwise of promoting publicity for architecture, for I should have had to fall in line with the "ayes" had the terms of reference fitted my feelings in the matter. Fortunately, in the interests of good sport, "Positive" has sufficiently elaborated his theme to create more ground of dispute than of agreement, so far as I am concerned. To clear the ground I may as well outline the points upon which we are agreed, and pause at our line of divergence.

I agree that very few members of the public have the slightest idea of what architecture stands for, or of how unrelated it is to expense—*i.e.*, an unarchitectural building may be much more expensive to build than an architectural one, though the reverse may equally apply. I agree that steps should be taken wherever possible to educate the public in the real meaning of architectural values, and that until such a scheme of education has really "got home" there is little hope of their showing discrimination in any intelligent way. I think that is just as far as I can go, because the important point to my mind is that the architect is far less important than the architecture. So long as the latter is achieved, the relative effect upon the profits of architects is of minor concern. If architecture can be produced satisfactorily by master builders, the latter have a perfect right to produce it.

The fact of the matter is, however, that whereas, not much over a century ago, the master builders were lining the streets of our country towns with façades of real architectural merit, a short generation of profitless experiment on the part of professed architects was sufficient to confuse all the builders of the country out of the habits of consistent design and taste. The architects found them with a sound tradition of proportion and architectural language, and left them with a babel of spurious Gothic, barge boards, and 1-in. antique timber work painted black.

It may be that the architect of the future is destined to restore order out of the chaos, but it is not by any means certain. It is more likely that he will continue to lead the fashion, which the builder may learn to follow with increasing intelligence. It is no extraordinary thing that 90 per cent. of our smaller buildings are erected without the help of an architect. A good many previous centuries can boast of 100 per cent. under this category, and those are the times which have supplied the models which we architects have busily measured and sketched.

If we architects are really concerned for the development of a sound building tradition we shall worry more about what is done than about who does it. Heaven help the Institute if it recruits the services of a publicity agent. We do not want that sort of thing. We do not want to mesmerise the public into the architect habit. We want to create in the mind of the public a desire for better architecture, and serve as a profession as the needs of society call forth.

One may be able to sell tea, cigarettes, petrol, or even cement, by continually putting these products under the nose of the man in the street, but one cannot create an aspiration of the soul by the same means.

Reading through "Positive's" opening a second time, I cannot help feeling that he started out with a sound idea, in which the woeful ignorance of the public upon architectural matters was the motive force: but that having once got the bit between his teeth, he bolted blindly alongside the less spirited cattle of commercialdom. I should like him to be brought back and take the subject at a jog-trot, which he can very well do in his reply, which I hope to read next week.

NEGATIVE.

THE QUILLER LETTERS

THE OUTLINE OF AN ARCHITECTURAL EDUCATION.

Annotated by M. A.

[*The names used in the Quiller Letters are all fictitious, and do not refer to any living person.*]

V.—PLUMB RULES AND CHALK LINES.

(QUILLER and Watcher were in more or less constant touch throughout the Easter Term of 1906, and though their letters are particularly interesting to me, as a friend of both of them, they deal with slight points in most cases that would hardly appeal to the general reader. Out of this sequence, however, I find the following, which may appeal to others than myself, and I give them for what they are worth. The following, in script, and on Prince's heading, serves as an introduction) :—

March 9, 1906.

The Committee of Prince's College requests the pleasure of Mr. R B. Watcher's company at a discussion to be held at the studio on Wednesday the 16th inst., at 7.30 p.m., upon the subject : " Are We Copyists? "

(There is a pencil note upon this invitation in R. B.'s handwriting, saying : " Accepted. 10/3/06.")

(The following letters are written subsequent to the above function) :—

Rex Quiller to R. B. Watcher, addressed to " Gables," and dated March 17, 1906.

MY DEAR MR. WATCHER,—I am so glad you were able to turn out last night, and only regret that doubtful rule of ours which precludes visitors and instructors from taking part in our debates, for I should like you to have had a shot at young Benedios, who spoke so plausibly that none of us managed to wipe the floor with him as we intended. He is a student from the Malay States, something of a scholar, and would be a likely architect if he could get all that nonsense out of his head. As it was, all of us, with perhaps two exceptions, knew he was entirely wrong, and yet could make no conclusive argument against him. It is always disturbing to be unable to justify one's feelings with logical argument, and that is really where we want to unmuzzle the older heads which our rules at present gag. If you could spare time to clear my head a little, I should be relieved and grateful; and I shall try to get up another discussion on much the same subject, if I can get all the good out of your explanations, which I know will be there.

Mr. Strathsay simply laughs about it, and he has for long given Benedios up, since the latter refuses all guidance and just follows his own line.—Yours sincerely,

REX. QUILLER.

(A note from Strathsay takes its place here) :—

MY DEAR R. B.,—Wasn't it a delightful evening on Wednesday? This is the third we have had since the little association has been revived, chiefly on the initiative of young Quiler. Benedios is a problem. He has all the attributes of brilliance, but is so set upon his own counsels that it is almost impossible to guide him. I have tried constraint, ridicule, and abuse, after much reasoning, but nothing will convince him that he is not a prophet sent down to earth to put all us erring ones to rights. His being a foreigner, and an Oriental at that, makes it all the more difficult to get under his skin. Fortunately he is not popular with his comrades and has not the influence he might have upon their impressionable young minds. Quiller seems thoroughly worried that the whole of them made such a poor show against the revolutionary advocate, but it is better, I think, for them to find and prime their own weapons.

By the way, have you seen Rowanshaw since he returned from Germany? He is full of enthusiasm for the " new architecture," and his sketchbook equally full of horrors! —Yours ever,

WARREN STRATHSAY.

(Slipped in the file here, and perhaps forgotten, is a pencil draft of the following letter to Quiller, which appears also in slightly different form as a carbon copy. Watcher seems to have been at pains to write just the right thing for the moment, and we may take it that he was disposed to treat the subject of discussion seriously. Being a man quick to scent the first signs of importance, his care does not surprise me, having known him so well. The letter is dated from " Gables " on March 21, 1906.)

MY DEAR REX,—I enjoyed my evening immensely, and am filled with admiration for you young fellows who have thought it worth while to revive a society which was once strong in numbers and talent, at a time when the ranks are thin; and to have discovered so much enthusiasm.

By no means change your rules. I think it excellent that we talkative and self-opinionated old fogies should be made to listen for once in a while; and I really think you will get more to the bottom of things if you thrash things out in your own way. Furthermore, you will debate with greater confidence when you are assured that people you imagine to be so much more learned than yourselves are not to follow.

Benedios would be an acquisition to any debating society, and on the night's showing, Prince's decided that the architecture of this country at the present time is that of the copyist, and all is dust and ashes! That in spite of the vote which went against him, ignoring the fact that not one single logical retort to his thesis appeared. We are told that battles are won on the playing-fields of Eton. Thank heaven policies are not settled in the debating societies of our colleges! For you all made an exceedingly bad show, believe me.

The young Malay has much assurance, and boundless self-confidence. Who else would have dared illustrate his paper by his own designs done in the studio? And borrowing yours for comparison was a clever stroke, because he destroyed your arguments in advance, and perhaps knew that you diffident young Englishmen would be loath to claim virtue in your own.

But you really would have found much to destroy his case out of his own material. He had produced a staircase as unlike any other staircase as possible, it is true; but you could very well have shown that he had no more " designed " (using his own interpretation of the word as " invented ") than you had designed yours. Yours was frankly modelled on a well-known example. His was modelled on all examples he knew of, and then disguised in not too skilful a way. In the first place the idea of steps at all is an acknowledgment of tradition. He would have been more consistent had he devised some form of slide or inclined plane, or a system of pulleys and ropes that would let you down gently. Instead he adopted the sensible form of steps. But far more glaring was the type of newel. Did you not see that it was fantastically adorned with a four-sided Greek antifixa, and that each edge had a bead and reel worked down it? The rest was sheer nonsense. Nobody but Benedios has yet used a handrail with a scalloped edge, because the form is absolutely futile. How can you run your hand down such a shape, and if you cannot run your hand down, how can you get continuous support when you descend? That is really all there is to it. Nearly all the traditional forms of design maintain themselves until better means present themselves. There has never been change for the sake of change in the fundamental principles of architecture. The Gothic builders did not choose the pointed arch because it was different from the round arch, but because it released all the possibilities of an ideal of vaulting. The Renaissance architects did not break away from mediævalism for a change of mouldings, but to express a newborn understanding of a dead civilisation which had done great things. Benedios had no argument for his inventions, but a desire for change for change's sake, and that is about the poorest and most trivial argument possible.

Furthermore, he is only attempting what a school of thought, or thoughtlessness, is now busying itself upon in Germany. That school is busy standing on its head at the present time and producing so-called architecture which screams its cleverness to all and sundry. But we must be gentle with the Germans, because they have so much less solid a tradition behind them compared with ours; and we must perhaps be fairly easy with your young man, because he can have no deep ingrained love for the traditions which have made English architecture so essentially national and sound. The crime would be for those who are born to such a history, and who have grown up among its works, to throw it all overboard deliberately and start conjuring.

Tradition is the sum total of the experience of many ages, in which the trivial and unimportant gives place from time to time, and all that is best remains. It is sheer impudence on our part to suggest that we can ignore all that and exchange it for some poor thing of our own fashioning. And the fact is that we cannot, as witness the steps and antifixæ of friend Benedios.

This is, of course, a difficult thing to argue upon. But that need not shake your confidence. I daresay some clever debater could make out an excellent case why it would be in your best interests to poison your mother, to which you might have no reply to convince him in return. But I do not think you would be likely to translate the argument into action on that account. Nor do I expect you to turn down the English tradition because the counsel for the defence of new art has made good use of his brief.

By all means organise another discussion and prepare your artillery. I shall hope to be there for another interesting evening's discussion.—Sincerely yours,

R. B. WATCHER.

(Preserved in the file at this point is a page from " The Architects' Chronicle " of March 25, on which appears an article entitled " The New Age, and what We are Doing for it." It is under the nom-de-plume of " Colonist," and R. B. W. had pencilled over it A.B. The subject-matter rather suggests that the anonymous penman may be the Benedios of debating fame, as otherwise the appearance of the sheet is difficult to account for. Perhaps an extract will be sufficient to quote here, as there is much of it, which, though comparatively fresh at the time, is perhaps too familiar to us at the present.)

" Our students have been so much occupied with the drawing and measuring of the antique that they have grown to the habit of looking always backward instead of forward. They can conceive no subject to be worthy the name of architecture that has not some outcrop of columns and cornices, and such columns and cornices which repeat exactly those which they have found in their books, or measured from old buildings. Why these features should be necessary they have no idea at all; and, if necessary, why they should take only that certain form is a question they dare not ask themselves.

" How can we *progress* if we tie ourselves down in that way? Surely if we have any pride at all in ourselves and in the times in which we live, we must do something to show that we have contributed something fresh to the history of architecture—something different from what has been done before, as we are different from those who have lived before.

" One comes from overseas to what one fondly imagines to be the seat of learning for the British Empire, but one finds nothing fresh, but all things dusty and musty with the accumulations of antiquity. It is all a matter of unintelligent habit, which is typical of the English character. ' Our fathers did this before us, and it must therefore be good

enough for us,' is the line of argument, if argument it can be called, which seems to govern the mental outlook of the young architects of to-day. Time will not stand still, however, and architecture must move with it or drop off like a rotten limb from the tree of social progress.

"It would be an excellent step if the educational authorities of our architectural schools combined to make a giant bonfire of all the architectural history books which at present cumber their libraries. Then might the students of the rising generation be induced to think for themselves and conceive something which history will recognise as the contribution which the twentieth century has made towards the history books of the future."

(Illustrating the article are a number of rather clever sketches in pen and ink. One typical series shows the portico of a Greek temple, that of St. Pancras Church, and that of a block of municipal offices completed just prior to that date. The perspectives are so arranged, and the sketches so treated as to make almost identical views of the three studies. Underneath the three is the one word "DESIGN!")

(To be continued.)

SOCIETIES AND INSTITUTIONS

WEST YORKSHIRE SOCIETY OF ARCHITECTS.

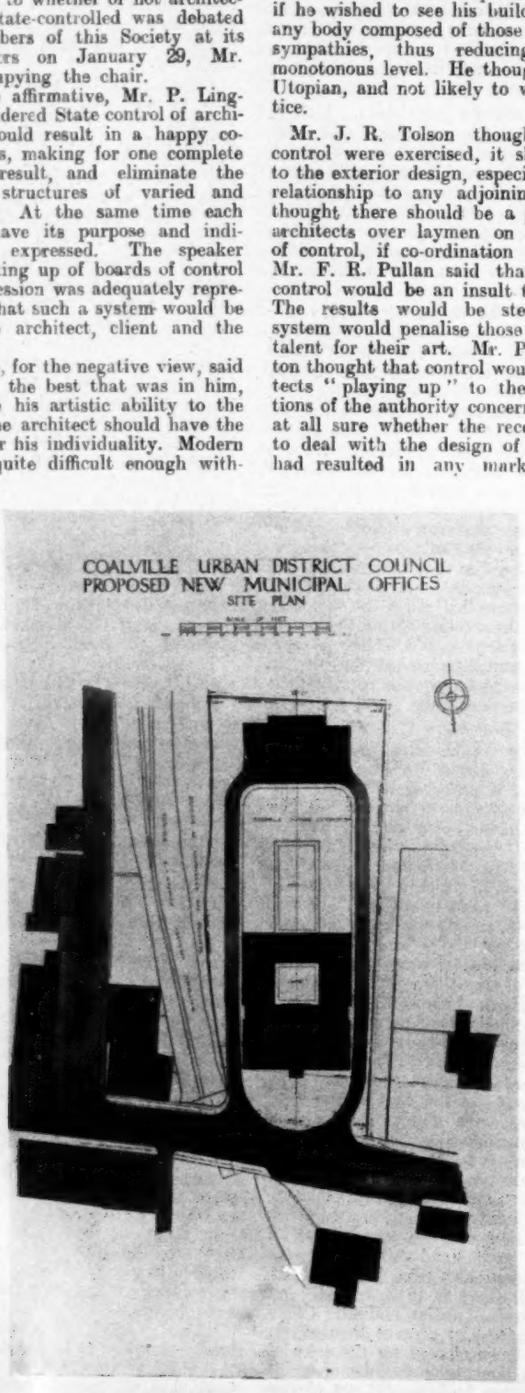
THE question as to whether or not architecture should be State-controlled was debated by associate members of this Society at its Leeds headquarters on January 29, Mr. F. R. Pullan occupying the chair.

Opening in the affirmative, Mr. P. Lingwood said he considered State control of architectural design would result in a happy co-ordination of units, making for one complete and harmonious result, and eliminate the present chaos of structures of varied and clashing design. At the same time each building would have its purpose and individuality clearly expressed. The speaker advocated the setting up of boards of control on which the profession was adequately represented. He felt that such a system would be of great value to architect, client and the public generally.

Mr. E. M. Price, for the negative view, said that to bring out the best that was in him, which was to use his artistic ability to the best advantage, the architect should have the utmost freedom for his individuality. Modern conditions were quite difficult enough without enacting laws that would hedge the architect in by a compulsory system of control. He would be tempted to play for safety if he wished to see his building approved by any body composed of those possessing varied sympathies, thus reducing design to a monotonous level. He thought the idea was Utopian, and not likely to work out in practice.

Mr. J. R. Tolson thought that if any control were exercised, it should only apply to the exterior design, especially as to its due relationship to any adjoining buildings. He thought there should be a preponderance of architects over laymen on any such boards of control, if co-ordination were to result. Mr. F. R. Pullan said that the suggested control would be an insult to the profession. The results would be stereotyped. Such system would penalise those possessed of any talent for their art. Mr. P. J. N. Penlington thought that control would result in architects "playing up" to the known predilections of the authority concerned. He was not at all sure whether the recent board set up to deal with the design of the Haig statue had resulted in any marked improvement being attained. Mr. F. Chippindale considered that it would be difficult to obtain boards of control which would be sufficiently catholic in their tastes. In any case the rota of architect members would need constant changing. On the whole he was opposed to the idea.

On the vote being put, the majority of those present decided against any form of control.



Block Plan: Second Premiated Design.

By MR. ARTHUR J. WOOD, F.R.I.B.A.

I.A.A.S. QUANTITY SURVEYORS' COMMITTEE.

A Quantity Surveyors' Committee has been formed by the Council of the Incorporated Association of Architects and Surveyors, composed of prominent practising quantity surveyors. The Committee has held an inaugural meeting, and is now considering the question of publicly-advertised appointments, including staff appointments, minimum fees for public works and other important matters. It is hoped, we are informed, that arrangements will be made to co-operate with the Quantity Surveyors' Committee of the Chartered Surveyors' Institution.

THE COLLEGE OF ESTATE MANAGEMENT.

"Fairness" in Rating.

In the first of three lectures, delivered to the College of Estate Management, Lincoln's Inn Fields, W.C.2, on January 20, Mr. C. Dalgliesh, F.S.I., County Valuation Officer for Berkshire, dealt particularly with the terms "fairness" and "correctness" which appeared in two sections of the Valuation Act, 1925. In his view, he said, "fairness" must mean legal fairness, and "correctness" legal correctness, and the values in the valuation lists must satisfy the statutory requirements contained in the definitions. After giving a summary of the leading post-War court cases, the lecturer said that the draft list might be challenged by any person who was aggrieved, but that did not mean that the ratepayer might challenge the list because he thought there was a slight inequality of assessment between his house and his neighbour's. It did not mean that if his neighbour was under-assessed, he also had a right to be under-assessed. The liability for rates was created by Statute. The authority which carried out the functions was a statutory authority, and the rates were a statutory charge. There could be no other basis on which one ought to pay rates than a statutory basis of value. The rating authority had to ascertain the correct statutory values of the property, and the assessment committee had to see that the statutory question, as to the rate at which the property might reasonably be expected to be let from year to year, was properly answered. Mere measurement did not mean value. Even if two houses were like peas in a pod, measurement did not mean value. The question to which the mind should be directed was the amount at which the property would let. In that way a fair and correct valuation list would be obtained.

Rating.

Mr. C. Dalgliesh, F.S.I., in a second lecture, on January 27, contended that a most important factor in all valuation of property, were it capital value or annual value, was the fixing of the unit of valuation. For rating purposes that, of course, meant the rateable hereditament. Frankly, he could not define "rateable hereditament," though he believed that most rating surveyors, when they went on to a job, somehow or other managed to define what they thought to be the correct unit of valuation. The point was really of great importance. For example, the number of farmers who would take a thousand-acre farm was infinitely smaller than the number likely to take a one hundred-acre farm. In other words, alteration of unit meant alteration of demand; alteration of demand meant in nine cases out of ten alteration in value. The question of unit had become, if anything, of

especial importance during the last six months because some of the most difficult and sometimes important questions from the ratepayers' point of view, when one came to deal with derating problems, really centred round the correct unit of valuation. In five cases on which judgments had recently been pronounced in the Divisional Court, three at least turned on that question. While apparently those cases were more directly concerned with the meaning of the word "contiguous," actually the problem was: Two properties, be they or be they not contiguous, do they or do they not form one unit of occupation? Therefore it seemed that the question of occupation was going to bulk very large in rating work during the next two or three years. Those dealing with rating problems from the authorities' point of view were rather gravely concerned with the effect of derating on local finance, because it appeared that the amount of income being lost from derating was very much greater and was extending to a great many more properties than had been anticipated.

An important question arose in connection with the unit of occupation as the foundation of rating when a property extended into two or more parishes or two or more rating areas. First, one had to bear in mind that although as a rating unit the parish had gone —*i.e.*, the overseer as parochial official had ceased to exist and there was a body operating for a collection of local government areas forming the rating area—it seemed better that rating surveyors should assume that the parochial principle continued. One still had, in fact, to make the valuation for the part of the property in each individual parish. That raised a still more difficult question in connection with the valuation of that which, in fact, was not a separate rateable hereditament. As to this, the lecturer referred his audience to Lord Loreburn's judgment in *Great Central Railway* v. *Banbury*. The speaker added that it seemed that some of the trouble to which derating cases were giving rise arose from the fact that the Courts were getting away from the old well-established rating principles. In fact, it had taken a House of Lords' judgment to re-establish the point that what had to be considered in valuing was what happened on the property rated and not what happened to the manufactured articles after they had left the factory.

LAW REPORT

Court of Appeal—The Master of the Rolls, and Lords Justices Lawrence and Romer.

SUCCESSFUL APPEAL BY BUILDING CONTRACTORS.

In this case the plaintiffs, Messrs. Ford and Walton, Ltd., building contractors, of High-road, Kilburn, N.W., appealed from a judgment of Mr. Justice Clauson, in the Chancery Division, in favour of the defendants, Messrs. Benson Greenall, of Old Queen-street, Westminster, S.W., and Mr. Matthew J. Dawson, of New-court, Lincoln's Inn, W.C. Messrs. Ford and Walton brought the action for rectification of a building contract, dated October 20, 1924, and for a declaration that upon the true construction of the contract the defendants were not entitled to retain any part, and that the plaintiffs were entitled to be paid the whole of the prime cost and provisional sums named in the specification and the bills of quantities. The plaintiffs' case was that in September, 1924, they, in competition with other firms, tendered for the erection of a block of flats for the defendants, in Wood-street, Westminster. The amount of their tender was £36,890, and was based upon the bills of quantities prepared by Mr. Walter Westmoreland, a quantity surveyor employed by the defendants. The £36,890 included provisional and prime cost items amounting to about £14,770. The tender of £36,890 was in excess of the amount the defendants were prepared to expend on the works, and subsequently the cost was reduced to £27,942. This also being in excess of the amount the defendants were prepared to expend, it was agreed that the plaintiffs should make an allowance to the defendants of £300, and also allow the retention monies to be calculated at the rate of 15 per cent. with interest at the rate of 6 per cent. per annum upon two-thirds of the retention monies instead of 10 per cent. In consideration of this the provisional and prime cost items in the specification and bills of quantities were to be for the use of, and under the sole direction and control of, the plaintiffs, so that the items should become fixed price items, subject to condition that the work executed and the material supplied should be of similar quality to those originally intended to be supplied. It was, plaintiffs alleged, agreed that the quotations previously obtained in respect of provisional and prime cost items should be handed over to Mr. Wilfrid Hasseldene, the managing director of the plaintiffs' company. Mr. Westmoreland agreed to reduce his charges by £42. It was then agreed between the parties, the plaintiffs alleged, that, making allowance for these deductions, the contract price should be £27,600. These terms were verbally agreed, and were afterwards put into writing, but the contention was that the written document did not correctly embody the terms verbally agreed, and were ambiguous.

The plaintiffs, by the action, asked that clause 20 of that agreement should be substituted by a clause stating that all specialists, merchants and tradesmen executing any work or supplying goods for which prime cost prices or provisional sums were included in the specification or bills of quantities should be approved by the architect, and should enter into contracts upon terms and conditions consistent with those in the building contract, all prime cost prices and provisional sums to be paid to the contractors and the latter, at their own expense, to engage the specialists, merchants and tradesmen to the approval of the architect. Alternatively, the plaintiffs claimed that they were entitled to be paid all sums in the specification or bills of quantities as being provisional sums on prime cost prices, and that the defendants were not entitled to retain any part of such sums.

The defendants denied that the contract did not contain the agreed terms. They contended that the plaintiffs had made out no case for rectification or for the declaration they claimed.

Mr. Justice Clauson so decided, and gave judgment for the defendants, and from this result the contractors now appealed.

At the conclusion of the arguments of counsel the Court allowed the appeal with costs, their lordships holding that, having regard to the evidence and the proper construction of the material documents involved in the case, the contractors were entitled to the rectification and relief which they claimed

THE TRADE DISPUTES BILL

In the recent debates upon the Trade Disputes and Trade Unions Bill considerable divergence of opinion was shown as to the proceedings that could be taken in connection with strikes and lock-outs, should the Bill become law. As regards criminal proceedings, under sub-clause (2) of clause 1, no person is to be deemed to have committed an offence either under the Bill or at common law by reason only of the illegality, under clause 1, of any strike or lock-out until the strike or lock-out has been declared by the High Court to be illegal, and immunity for acts committed before that declaration is conferred; but the Attorney-General contended that the Bill made no alteration in the law as to obtaining an injunction for threatened injury from an illegal strike, and that a trade union could be made a party to such an action, the only difference imported by the Bill being that under clause 4 the Attorney-General must be made a party to such proceedings. Sir John Simon strongly dissented from this view, and pointed out that as the Bill proposed to repeal sub-section (4) of section 1 of the Act of 1927, no court, if the Bill became law, could entertain such an action brought against a trade union at the suit of an ordinary individual. Later in the debate the Solicitor-General, in a reply to Sir John Simon, appears to have admitted that the action could only be brought against individual members of a union, and he instanced a case now proceeding in the Law Courts against 36 members of a trade union lodge for an injunction to restrain them from watching and besetting colliery premises. This issue will now have to be fought out in Committee, but we draw attention to the inevitable delay that must occur in dealing with such events as occurred in 1926, even if the Attorney-General's contention be correct. Criminal proceedings cannot be taken under the Bill until the Court had made a declaration on that very point which has evoked such a difference of legal opinion during the debate, the legality or illegality of any strike or lock-out under the terms of the Bill.

Then as to civil proceedings by way of injunction, even if the contention of the Attorney-General be accepted that such proceedings would be available under the Bill, yet such proceedings from their nature must be lengthy. Sir John Simon instanced the case heard during the general strike as showing the delay, but the case now proceeding, referred to by the Solicitor-General, affords another example. The question raised in that case, so far as it is reported, appears a comparatively simple one involving apparently a decision whether an already recognised custom as to card showing has been abused, yet that action commenced on January 27, and, after four days' hearing, was not concluded on January 30.

If we place ourselves in the position we were in as a community in 1926, with every condition of ordinary life dislocated, would it be calculated to cultivate a calm spirit to know that no remedy, either criminal or civil, could be obtained in the Courts for a period of many days, and would the Courts under such conditions be in a position either to obtain the necessary evidence, or to feel certain in the heat of the moment that that evidence on either side was strictly reliable?

THE ESTIMATOR'S DIFFICULTIES.

Sir,—Mr. J. R. Taylor's comments on my recent letter show that he considers the traditional method of quantities as a fairly useful —though perhaps expensive—way of obtaining estimates, but he makes no attempt to justify the method beyond remarking that it is easier than the alternative I suggested, and is favourably regarded in high places.

I am perfectly aware of the difficulty entailed in adopting the method of producing quantities in such a manner as to allow of their being a little more than a rough check on the cost of the work when in progress. The question of the wastage of materials during building operations depends on various circumstances. In the case mentioned in my previous letter of numbering certain roofing tiles, it rests on the care expended by the unloader, the skill of the layer, and the brittleness of the material. But this is no reason why a standard allowance for waste should not be incorporated in bills of quantities. In measuring the length of timber floor joists it should be possible to take all above a certain length out of the smallest purchasable piece and bill as such, and any below that length—where two or more could be obtained from a larger piece—the net measurement when fixed.

The builder has now in many cases to calculate the amount of material required in a different manner from that adopted by the quantity surveyor—although he sometimes performs practically the same calculation—and has also to check the latter's figures. Thus, there may be three operations in many cases where one would suffice.

I am not suggesting that quantity surveyors should make a complete inventory of the material required in a building, but there appears to me to be a need for more co-operation between them and builders. The suggestion that many quantity surveyors are pressed for time and frequently are not supplied with completely detailed drawings—probably because the architect has also been rushed—is no reason for not trying to remedy matters.

J. W. Davies.

RESTORATION OF ST. GEORGE'S CHAPEL, WINDSOR

A PAPER on this subject was read before the Royal Society of Arts on January 28, by the Very Reverend Albert Baillie, C.V.O., D.D., Dean of Windsor. The Marquess of Londonderry, K.G., presided.

When Edward the Third founded the Order of the Garter, said the lecturer, he had a chapel ready to his hand. The old palace had been in the Lower Ward of the Castle—for Windsor Castle was divided into three Wards—the upper, middle and lower. Henry the Third had built an important chapel as the Royal Chapel. When the old palace was burned and the King moved into the Upper Ward, Henry the Third's chapel escaped. But it was no longer convenient as a Royal Chapel. So it was free for Edward the Third to use for his special purpose. On the site of the old palace he built the two cloisters which stood to-day: the stone cloister of the Dean and the wooden cloister of the Canons. Opposite, on the south side of the Ward, he built the houses for the Poor Knights and he assigned the towers of the Lower Ward to various uses connected with the Order: the Chancellor's Tower, the Winchester Tower, and so on. The whole Ward, in fact, was devoted to the Order of the Garter. Edward the Fourth determined to build a new chapel. His was a time of building; otherwise we did not know his motives. He built the whole of the wall of the choir and the nave and transepts, up to the sill of the windows. But the nave was one bay shorter than it was now. Either it was that he had not time to put in the stone vaulting, or his architects shirked what was indeed a difficult problem. So, instead of the stone roof, an obviously temporary and unfinished wooden roof was put over the choir. The chapel remained like this until the time of Henry the Seventh. He determined to complete it and add the vaulting. He practically completed this, except for certain parts of the vaulting which were not finished till Henry the Eighth's time.

The original work under Edward the Fourth had been carried out by Beauchamp, the Dean, apparently a man of great character and ability. Reginald Bray, who also built Bath Abbey, supervised Henry the Seventh's building. This latter work was of extraordinary beauty, but the builders took such chances and scamped their work so flagrantly that it seemed that their action was an angry protest against Henry the Seventh's parsimony. It was from the way in which these men did their work that all the present difficulties had come. Eighteenth century restorations were also very faulty and the way restorers of this period covered up weaknesses and cracks with plaster and cement merely concealed the real trouble. A final source of weakness came from the Bath stone used by Gilbert Scott in his restoration of the 'sixties. All this stone had had to be replaced.

But main attention had to be directed to Henry the Seventh's work and especially to the stone vaulting. This vaulting was the first of three great vaults, built by the same architects or designers, who, following St. George's, developed their ideas in Henry the Seventh's Chapel and then in King's. St. George's was the first of the three and the builders never again attempted so flat a vault. Nor did they again attempt a vault with so little provision for stability. In Henry the Seventh's Chapel at Westminster the supports were almost overdone, as if the architects were thoroughly frightened by what they had done at St. George's. Christopher Wren, in his famous report on St. George's Chapel, pointed out that the margin of strength allowed for the vaulting was the very smallest that could have been provided, though things were much worse than even Wren imagined. Practically the only support was a series of flying buttresses, meeting buttresses against the wall of the side aisle. There was another incredible piece of carelessness which added to the danger. It was found that the south wall had given out seven inches, and the architects thought that this indicated some weakness in the foundations of the buttresses. The chapel stood on a chalk rock. On the north side the builders took the buttresses down to the chalk, but on the south side, where the ground sloped a little, they only took them to within some eighteen inches of the chalk, leaving clay between. This clay naturally was compressed and the compression allowed the walls to give outwards. Consequently, the centre of the vault dropped about eleven inches and stuck there. But there were great cracks all over it. These were discovered by Wren and he filled them with lead. Wren was never able to carry out a thorough restoration, probably from need of funds. The cracking of the roof was also made more serious because of the method of its construction. It was not bonded together, and, consequently, the cracks spread from end to end, some of them almost wide enough to put a hand into. All these cracks had been concealed by the plaster with which they were covered in the eighteenth century. But the cracks slowly widened and it was through the falling of some of the plaster from the cracks that Sir Harold Brakspear (who carried out the restoration, first realised the dangers hidden in the roof. Meanwhile, the reconstruction of the wooden roof was begun. This roof was made of enormous beams, given by Bishop Beauchamp, from Burnham. They were not quite long enough, resting only eight inches on the wall at each side. The wall itself had never been finished and the beams had all decayed, some in part and some competely. But as soon as Sir Harold moved the first great beam, the cracks in the vaulting below began to widen. There were then some hectic weeks spent in building a platform through the whole length of the choir, on which the roof was shored up with a really beautiful network of beams, fitted to the groins of the vaulting. When this was done the wooden roof was carried through.

The problem of how to deal with the cracked vaulting was very serious. By Sir Harold Brakspear's wish Sir Giles Scott had been appointed as consulting architect, and he called him in for a consultation. They came to the conclusion that the only thing to do was to take the whole vault down, stone by stone, two bays at a time. The stones were numbered and the faulty ones replaced. Some had been cracked when the two edges were brought togther by the drop in the roof. These could not be used again. But in the main the old stone was used, except in the lower part of the springers, where there had to be new stones, in order to bond them into the side walls. This difficult and delicate task of rebuilding the vaulting was carried out with great success. Meanwhile, the buttresses were underpinned on the south side and the flying buttresses were replaced. They had been covered with cement in the eighteenth century.

At last stability was restored, but there was another very curious weakness which had to be dealt with. In half the north aisle the roof was higher than the rest, in order to make way for the upper chantry of Edward the Fourth. To get the flying buttresses to meet the lower buttresses it was necessary to do what had now been done—that was, to take them through the chantry. However, Henry the Seventh's builders did not take this course. They simply placed them on the roof of the chantry, many feet apart from the lower buttresses, so that they rested against nothing and were absolutely useless. If this had been on the south side, it would probably have seriously affected the building. As it was, it did not seem to have done much harm. However, it was thought necessary to place them in their right position. The next problem was the transepts. They presented two problems. The original intention was to cover the crossing by a tower and lantern. Probably the architects felt that the pillars were not strong enough to bear this—although they certainly contemplated it, for the beginnings of the work were still visible. Henry the Eighth filled in the crossing with some extraordinarily flat vaulting. After consideration, it was decided that the springers could be rebuilt and the rest grouted, and that stability could be established by these means.

The two transept chapels, however, were more difficult. It seemed as though the original intention was to build the chapels only one story high, like those at the west end. It was an afterthought raising them to the full height of the nave. But the original builders did not put buttresses, although they added the heavy vaulting. Thus, without the buttresses, the vaulting was supported on thin pillars for the whole height of the chapel. The restorers were very reluctant to alter the exterior by the addition of buttresses, but finally, after a consultation of the two architects with a distinguished engineer, it was decided that buttresses alone would meet the difficulty. They were the only material alterations made in the chapel, and it was generally agreed that they added very much to its beauty. But the west front presented still another remarkable problem. This front was part of an addition made by Henry the Seventh. He had added a broad bay, out of which came two side chapels of the same type as those which form the transepts, but lower and smaller. Here the most incredible condition was found. The chapel on the south side was built over a chalk pit, and instead of taking the foundation down to the bottom of the chalk pit, a feeble, roughly built arch was built over the hole. This was the only support given to the chapel. How it remained in position no one could say. This early mistake had been corrected, and the chapel had now been made secure.

There were two restorations which very much affected the beauty of the exterior. The first, of course, was the restoration of the Kings' Beasts to the pinnacles. Admirably carved by Mr. Armitage, they now gave an extraordinary richness and vivacity to the external view of the Chapel. They had also replaced the cupolas on the two chapels at the west. These were a very distinctive part of Henry the Seventh's design. Internally, the changes made were few but important. The organ formerly stood in the middle of the screen, interrupting the view of the roof from end to end. The organ was therefore divided, and placed at the two ends of the screen, and there was no doubt of the extraordinary additional beauty the change had made. The only other alteration was the replacing of Dean Urswick's beautiful screen to the front of his chapel. It was removed when the monument of Princess Charlotte was put there. It was very unfortunate that this chapel should have been chosen for the monument. Its walls were covered with frescoes, which were destroyed, and besides, Dean Urswick was one of the most interesting people connected with the history of St. George's. The Chapter of the time remonstrated at the removal of the screen and entered their remonstrance in the minutes. But their protest was overruled. So they stored the screen away with great care. No one could doubt the beauty of the screen, now that it had been put back in its old position and, far from injuring the effect of Princess Charlotte's monument, which had its admirers, he believed that it enhanced its beauty.

BUILDING REGULATIONS & BY-LAWS.—V

By W. T. Creswell, Barrister-at-Law, Hon. A.R.I.B.A., etc.

SEWERS AND DRAINS.

Model by-laws issued by the Ministry of Health do not contain clauses requiring the local authority or any owner to provide sewers to take the drainage of buildings erected in new streets; the reason given for this being that the conditions which such by-laws must satisfy are to a great extent dependent upon the varying circumstances of different localities; and, further, that it is not considered that the matter is one in regard to which by-laws could usefully be made.

In the absence of such by-laws, an authority cannot refuse to approve plans of new streets which do not include any system of sewerage thereon, so long as they are in all other respects in accordance with the by-laws in force in the district. See R. *v.* Tynemouth R.D.C. (1896), 2 K.B. 451.

A by-law made locally which requires a person who *voluntarily* provides a sewer in a new street to construct it *in a satisfactory manner* is not objected to by the Ministry. The model by-laws do, however, actually provide for a person "constructing" a new street (not "laying it out") to make provision for the water therein to be carried off. And, or course, under section 150 of the Public Health Act, 1875, and under the Private Streets Works Act, 1892 (where it has been adopted) the local authority concerned is entitled to require owners along a private street to defray the cost of all sewers therein before the street is taken over by the authority as a highway to be repaired by the inhabitants at large.

Within the Metropolis the London County Council obtains its powers to make by-laws dealing with and regulating the dimensions, form and mode of construction of, and the keeping, cleansing and repairing of, the pipes, drains and other means of communication with sewers and the traps and apparatus connected therewith under section 202 of the Metropolis Management Act, 1855.

These by-laws are administered by the Borough Councils, in some instances (curiously enough) by the sanitary departments, and in some instances by the Surveyor's Department; a lack of uniformity which does not appear to be explainable.

These drainage by-laws might well be revised, and it would be well if the duties of the two departments were defined and that in all cases the superintendence of drainage work were left to the Surveyor's Department.

Combined Drainage.

In the Metropolis the drainage of buildings in combination with one another is recognised and is provided for by Statute under section 74 of the Metropolis Management Act, 1855, but no provision is made for combined drainage outside the Metropolis. Under section 25 of the Public Health Act, 1875, it is compulsory that every new house be provided with means of drainage communicating with a sewer—if there is a sewer within one hundred feet. The courts have, however, held that this section precludes combined drainage of two or more houses.

Provision might well be made by Statute for combined drainage outside the Metropolis in the interests of economy in building, for by-laws, though they do not forbid combined drainage, are not the most effectual methods to adopt by which such provision should be made.

Ditches and Watercourses.

Whilst on the question of drains, it may be well to refer especially to the powers an urban authority has if, and when, it has adopted Part V. of the Public Health Act, 1925. Under section 51 thereof an authority has power to require that any ditch or watercourse which is situated on land laid out for building shall be covered in before any building operations are commenced.

Under section 52, no stream or watercourse can be covered in except in accordance with plans and sections which, when submitted, are approved by the authority; and under section 53 an owner or occupier of any culvert is liable for the cleaning, repair and general maintenance of such culvert.

THE WEEK IN PARLIAMENT

Westminster, *Wednesday.*

Loans of Works of Art.

The British Museum and National Gallery (Overseas Loans) Bill, which provides that the trustees of the British Museum and the National Gallery shall be empowered to loan works of art for exhibition overseas, has been read a second time in the Lords. The Government met the critics of the Bill by undertaking to consider in Committee amendments to safeguard these works of art in transit.

Houses Built in 1930.

Major Glyn asked the Minister of Health if he was in a position to give the total number of houses built in England and Wales during 1930; what were the number built under each of the Housing Acts; and what proportion were houses letting at a rental of less than 8s. a week.

Mr. Greenwood said that returns as to houses erected without State assistance were obtained only for half-yearly periods, ending in March and September respectively. The last year for which complete figures could, therefore, at present be given was that ended September 30, 1930. During that year 161,699 houses of a rateable value not exceeding £78 (or £105 in the Metropolitan Police District) were completed in England and Wales, of which 51,324 were erected with State assistance (14 under the Housing, Town Planning, etc., Act, 1919, and 51,310 under the Housing (Financial Provisions) Act, 1924), and 110,375 without State assistance. Those figures did not include houses erected by local authorities in replacement of houses demolished under improvement and reconstruction schemes. He was unable to state what proportion of the houses in question were letting at a rental of less than 8s. a week.

Slum Clearance.

Mr. Greenwood informed Mr. Mills that he had received from local authorities in England and Wales 95 resolutions declaring areas to be slum-clearance areas within the meaning of section 1 of the Housing Act, 1930.

In reply to Mr. Day, the Minister said that resolutions had been passed declaring 17 areas in London, occupied by 2,174 persons, to be clearance areas under the Housing Act, 1930. In addition, one improvement scheme under the old legislation, involving provision of rehousing accommodation for 2,632 persons, was confirmed after January 1, 1929.

The Fall in Prices.

Mr. Ramsbotham asked the Minister of Health whether the general fall in prices had been reflected in the cheaper construction of subsidy houses; and what was the average price of a council subsidy house in 1930, as compared with the average price for a similar house erected by private enterprise.

Mr. Greenwood said that there had been a substantial fall in housing costs over the last six years. The average cost of building non-parlour houses provided by local authorities in England and Wales during 1930 was £340. Information as to the cost of houses erected by private enterprise was not available.

Home or Foreign Timber?

Captain Crookshank asked the Minister of Health whether, in view of the fair wage clause, he had any information whether local authorities were using timber imported from Russia in the erection of subsidy houses.

Mr. Greenwood said he had no precise information on the subject, but he did not doubt that local authorities, in accordance with the advice which he had given to them, were making use to the utmost extent practicable of goods and materials of home production and manufacture.

A Kensington Scheme.

Mr. Greenwood informed Mr. West that the programme prepared by the Metropolitan Borough Council of Kensington in pursuance of section 25 (2) of the Housing Act, 1930, contemplated that the schemes for clearance and improvement to be undertaken by the Council during the next five years would result in the displacement of 400 persons. The Council had already passed resolutions declaring two areas to be clearance areas. 275 persons would be displaced from these two areas.

Art Students.

Sir C. Trevelyan, President of the Board of Education, informed Mr. Campbell that the number of full-time students at the Royal College of Art for the last completed year was 386. There were 211 students attending the School of Design, but this school covered a wider field than that of preparation for employment in manufacturing industry. Of the 124 students at the College who completed their course in July last, 16 were known to have obtained industrial employment as designers or art workers.

INQUIRY BUREAU

[Reply to "Builder," January 30.]

Dampcourse.

Sir,—The best way is to lay a dampcourse through both thicknesses of the cavity wall below floor level, and another dampcourse above ground level in the outer thickness only. The back of the outer face from one damp course up to the other may then be lined with two courses slates in cement or with asphalt, thus entirely sealing off contact between the ground and the floor.

Construction.

Inserting Dampcourse.

Sir,—An old building which I have to deal with stands on a damp site of clay, and has no dampcourse. All the walls, including the inside division walls, show damp for two or three feet up, and it is proposed to cut out and insert a dampcourse throughout. This means taking up all floors. Is there a quicker and cheaper remedy?

Making Good.

Standard Measurement.

Sir,—I should be glad to know what is the publication which sets out a Standard Form of Measurement for quantities, by whom it is published, what bodies have recognised it, and to what extent it holds good in matters of dispute in law. In a dispute as to the interpretation of certain measurements and descriptions, has the Standard Measurement ever been recognised in an award, either in the courts or at arbitration? Practice.

Size of Bricks.

Sir,—Is it possible to obtain in the south country the thicker size of bricks usually found in the Midlands and North? It seems that any unit which raises the work so much higher for practically the same labour is bound to make for cheaper building and one wonders to see a tendency more towards thinner bricks than standard rather than the reverse. Is there any reason for this?

Northerner.

Sackville House, Piccadilly.

With reference to the illustration that appeared in an advertisement on page lxx in our last week's issue, the advertiser omitted to state that Mr. G. J. Skipper, F.R.I.B.A., is the Architect to the Sutton Estate and designed the elevation of the building; and the Architect for the building commissioned by the building owner was Mr. Andrew Mather, L.R.I.B.A., F.I.A.A.

THE BUILDING TRADE

ESSAYS ON BUILDING PRACTICE—VI

By J. R. TAYLOR.

THE 1909 AGREEMENT AND ITS IMPLICATIONS (*Continued.*)

Clause 13 deals with the preparation of the final accounts, and gives a definite ruling that they shall be prepared by the architect or the surveyor. It is presumable that the alternative was intended to cover the cases where the architect himself prepared the quantities, and that the intention was that in all cases where a quantity surveyor was separately employed his name should be inserted in the space provided. This is as it should be. It is to be noted, however, that the clause uses the words "measured and valued," not "prepared," and, as a result of this, many architects call upon the contractor to present a complete detailed claim before the surveyor is called in. This is an evasion of the true intent and meaning of the clause, which definitely states that the extras and omissions, where capable of being so dealt with, are to be measured and valued by the surveyor or by the architect acting as a surveyor. The accounts in the majority of cases cannot be prepared (or, at all events, properly prepared) until the measurements have been taken, and the duty of setting a value on the measured items is that of the surveyor.

The common practice of calling on the contractor to prepare the accounts in the first instance imposes, in many cases, a burden on the contractor that he should not be called upon to bear, and generally operates to his disadvantage. Usually it is assumed that any claim he may present may be safely scaled down without subjecting him to an injustice. It may, of course, sometimes happen that this view is borne out by the facts, but in my experience the general effect is that the contractor does not receive all that he is justly entitled to. In a later essay I will deal with this vexed question of final accounts and their preparation at some length.

Clause 15 is generally interpreted to mean that advances made upon materials brought on to the site are only to be included in any interim certificate at the will of the architect, and not as a right to be enjoyed by the contractor under the terms of the contract. Now, all contractors of standing have at some time or another come in contact with the nervous architect, particularly the nervous official architect. Some of these, not sufficiently reassured by a bond and a heavy retention percentage, make great difficulties about issuing certificates consistent with the full amount of the fixed material, and refuse to consider unfixed material lying on the site. This makes the job very difficult to finance, particularly so when a contractor manufactures his own joinery, and conscientiously carries out the instructions given as to framing it up, but not wedging it soon after the contract is signed. Architects do not always appreciate the position arising, and perhaps the following instance may serve to throw a little light on the way it may hit the contractor:—

A contract was for about £20,000.

The bond £1,000.

Terms of payment 80 per cent. as the works proceeded, which gave a further average security of upwards of £2,000, rising to £4,000.

Employer's grace days for honouring certificate, 28.

Time for completion, 12 months.

The carpenter and joiner's bills came to nearly £5,000. It was stipulated that joinery should be framed up immediately after signing of contract. That floorboards should be stacked on site for at least a month prior to use. Lime putty for plastering to be run at least a month. At the half-way stage the contractor was standing out of £2,000 in retained money, had upwards of £1,500 locked up in partly manufactured joinery and, with the slates, at least another £500 in unfixed material lying on the site, to say nothing of the value of his plant. The time taken for honouring certificates was usually three weeks, and as work had to progress at the rate of £400 per week to obtain completion within the contract period a further £1,200 had been expended by the time the certificates were met. This, of course, was an exceptionally hard case because the more general terms are ninety per cent. as the works proceed and payment of certificates generally is reasonably prompt; but, even so, building finance is usually a severe handicap and makes for dear and slow building.

Backed by a bond, five per cent. would, as a rule, give ample security, particularly if certificates were issued at the instance of the surveyor. Such certificate should also include not less than seventy-five per cent. of the value of acceptable materials brought on to the site. On smaller works, where a bond is not considered necessary, ninety per cent. is fair enough as a rule, if unfixed material is taken into account.

Clauses 17 and 18 deal with the powers of the architect in regard to rejection and replacement of inferior workmanship and material. Taken at their face value, they are reasonable enough in the main, and generally speaking they work well enough in practice. But in inexperienced hands they can be dangerously used, and it is only reasonable that they should be governed by the later clause as to arbitration.

Clause 19, consisting of but two lines, gives the architect power to object to the employment of any sub-contractors, but in practice it resolves into the appointment of approved contractors. It is sometimes sought to tie the builder down to the submission of a list of sub-contractors at the time of sending in the tender. This is least objectionable when plenty of time is given in which to prepare the main estimates, but, as I have already shown, it is seldom that the estimator has sufficient time to go as closely into it as he would wish. In response to a demand for a list of sub-contractors in the form of tender it is as well to write:—"Unarranged, but no sub-contractor will be appointed without approval." No reasonable architect will refuse to consider a tender thus endorsed. If the tender, being the lowest, is rejected on these grounds, the contractor, far from regretting it, should congratulate himself on his narrow escape.

Clause 20 has the effect of making into sub-contractors all the architect's often considerable array of specialists, for whom the contractor is to accept full responsibility, not only as to finance, but as to the workmanlike quality of their work. This is illogical. The very word specialist denotes one who by concentrated study and application to one particular art or craft has not only fitted himself to practise it in a manner superior to the general craftsman, but has so wide a grasp of his subject both theoretically and practically as to be able to assist and, when necessary, instruct the architect how the object in view is best to be attained. If it does not denote all this it means little or nothing. In regard to some branches of the trade it is a matter that is causing a good deal of feeling amongst builders who are themselves master craftsmen, but find themselves sometimes pushed on one side in favour of so-called specialists, to whom they could teach a good deal. Under this clause and clause 17 the general contractor is made ultimately responsible for the quality of the workmanship and material of a "specialist" in whose appointment he has no voice. It is true that the clause empowers him to reject a specialist who will not sign an agreement covering all these risks, but even if this were habitually enforced it would in many cases afford but a small measure of protection to the main contractor. The clause, however, goes a good deal further and stipulates that merchants supplying articles under p.c. sums are sub-contractors, and that the main contractor must uphold such articles for the duration of the contract. A merchant of standing may give a guarantee with his goods, but such a guarantee seldom, if ever, extends to damages that are consequential to failure.

In view of the ever-growing tendency to employ specialists, it is time this clause were re-drafted in such a way as to relieve the contractor of this sort of risk, and that the architect should himself see that his nominees signed a suitable form of contract before calling on the contractor to accept their estimates and quotations. Some contractors are capable of looking after themselves in such matters, but nobody knows better than the architect that this does not apply to all the builders whom he invites to tender, and that his nomination is in itself accepted as a sufficient warranty in all good faith. To put it another way, the architect throughout the agreement calls for unquestioning trust, and for the time being subjects all other parties to his rulings. It is of primary importance, therefore, that he should not even appear to favour any party to the agreement. In effect, his chosen specialists should be just as much parties to the agreement as though they had set their hands to it and be equally subject with the builder to all the penalties involved.

(*To be continued.*)

INDUSTRIAL STATISTICS, 1930

A review of the industrial conditions of the past year cannot be very cheerful reading. The year 1929 was by no means satisfactory, but there were some hopeful features from which it could be deduced that conditions might improve in the near future: The Board of Trade index figure as to the volume of production showed that production was more than steadily maintained throughout the year and attained the percentage figure of about 110.3 towards the close of the year, and exports of produce and manufactured goods of the United Kingdom showed an increase of 1.3 per cent. Unemployment was serious—10.5 per cent.—but it had shown a seasonal decrease at one time in the year, although that decrease was somewhat more delayed than usual; but, besides this, as we showed in our article last year, the figures relating to the employed population indicated that the increase of population, which the Balfour Committee estimated at about 100,000 per annum, was being absorbed into employment, and, in addition to this, the important basic industry—coal-mining—during the greater part of the year showed improvement. Yet, after considering these hopeful symptoms, and quoting from the Balfour Committee observations showing the importance of our export trade if we were to maintain our industrial and social position, we were constrained to ask the question: "Are we paying our way?"

If that question be repeated at the present time, we have little doubt that the answer must be in the negative. This past year the index figure of production fell from 110.9 in the first quarter to 99.30 in the September quarter (this is the last figure available), that is, below the figure on which

the index number was based in 1924; exports of British produce and manufactures declined about 20 per cent.; the average percentage of insured persons recorded as unemployed, including those temporarily stopped, in place of 10 4 per cent., was 16.1 per cent., and, what is very significant, the number of insured persons aged 16 to 64 in employment, despite the increase in population mentioned above, fell from an estimated average of 10,207,000, the highest figure recorded, to 9,764,000, the lowest figure recorded since 1926, the year of the general strike. In addition, the coal-mining industry showed a decline during the year—first slight, but then heavy.

These are only a few of the depressing features to be noted at the end of last year, and it has become in certain quarters customary to attribute all our evils to "world causes" as an excuse for not looking towards home and endeavouring to ascertain how world causes can best be counteracted. World causes have undoubtedly adversely influenced this country, for, if we take the figure quoted above, the 20 per cent. fall in exports of British produce and manufactures, we see it is stated in *The Times* that the domestic troubles experienced in four of our largest overseas markets—the United States, Australia, India and China—accounted for almost half that decrease; but so long as we are in this world we must adjust our sails to meet world causes. In excuse for the present state of unemployment here it is customary to dismiss this by saying there is unemployment in other countries, and, therefore, it cannot be helped, or it is not due to any local causes. We see figures quoted giving the number of persons unemployed in other countries, without those figures being in any way compared with the relative populations, which alone can give any idea of the gravity of the situation here as compared with the countries named. We see exports of coal from other countries compared with our own, without any inquiry if in that other country hours were shortened at this industrial crisis, or whether they were lengthened; and, lastly, we see that the burden of taxation per head in this country is £15 13s., while that of the United States is £6 3s., and the rateable value per head here is £7 7s. 8d., but take no account of how these charges coupled with the higher wages payable here than in some other countries affect our competitive powers in the open market, and we set ourselves to maintain a standard of living which is coming to include luxuries as necessities, regardless of the fact on this head that there is any such thing as "world depression."

In this connection, before turning to the detailed statistics, we must make one observation on the speech of Mr. Reginald McKenna at the annual meeting of the Midland Bank, because we feel that certain observations of his relative to the use of money may be quoted as militating against the views we have just expressed. Mr. McKenna, in an extraordinarily lucid address on the world's economic troubles and the monetary policy, spoke of possible excess in saving and the lack of use of money; but these observations must be read in connection with the subject he was discussing, the monetary factors; and that he does not advise reckless unproductive expenditure is proved by a letter on retrenchment addressed to *The Times*, January 26, by him as a joint signatory with Lord Grey of Falloden, in which the final passage was as follows:—"We appeal, therefore, to all who share these views to join in an organised endeavour to concentrate public attention on three simple propositions: (1) That the weight of existing taxation is a prime cause of the present stagnation in trade; (2) that the road of public waste is the road of want and privation for the great mass of our people; and (3) that it is only by living strictly within our means that we can expect to ensure a progressive level of comfort and well-being." These are precisely the views we recently expressed in these columns. We now turn to the statistics for the year 1930 as contained in *The Labour Gazette*, and unemployment must take the first place:—

As we have already stated, the average percentage of insured persons unemployed in Great Britain and Northern Ireland was 16.1, as compared with 10.4 in 1929; 11.8 were wholly unemployed and 4.3 per cent. temporarily stopped, as compared with 8.2 wholly unemployed and 2.2 per cent. temporarily stopped in 1929.

The number of persons unemployed is derived from the number of persons insured and uninsured on the registers of the Labour Exchanges, and on December 29 last the numbers were 2,724,978, as compared with 1,552,445 on December 30, 1929. Of the above numbers, those wholly unemployed in 1930 were 1,934,524, as compared with 1,129,975 in 1929, and 790,454 temporarily stopped, as compared with 422,470. These figures do not, however, provide any precise guide as to the conditions of the industrial market, as the numbers on the Exchanges vary from other causes. Thus, in the *Labour Gazette* for November last it was explained the numbers are affected by three main factors: (1) the state of employment, (2) the extent to which unemployed insured persons have maintained contact with the Exchanges, and (3) the changes in the conditions for the receipt of unemployment benefit, and a table is given showing the fluctuations in the numbers since 1923, taking that year as the standard 100. If that table is analysed we think it will show that the first factor, the state of employment, plays a less important part than the other two factors, which are really inter-related, as the relaxation of conditions for the receipt of benefit must influence the desire to maintain contact with the Exchanges. Between the years 1925 and April, 1928, certain restrictions were reimposed, and for those years the percentage figures were: 1925, 103.5; 1926, 104.8; 1927, 105.6; 1928, 106.5. The slackening in the increase of numbers between 1925 and 1928 is attributed by the *Gazette* to the reimposing of certain conditions, and also to the abnormal conditions prevailing in 1926, while the increase in the years 1928 and 1929, it is admitted, was due in part to the relaxation in restrictions. The most drastic change in conditions for unemployment benefit came in March, 1930, when the test for seeking work was altered, and the index figure rose from 108.4 in 1929 to 111.2. The *Gazette* estimates the increase in numbers at not less than 60,000 from this cause, as "the great majority of these were persons who would otherwise have dropped out of the statistics of the numbers insured." We have said enough to indicate that the figures relating to unemployment are not by any means an indication of the conditions of industry, but depend upon the terms upon which unemployment benefit is granted, as well as upon the classes of persons brought within the Unemployment Insurance Acts.

The percentage of insured persons unemployed is the highest recorded since the year 1921, when it stood at 17.0, as against the present 16.1. That was the year of the coal strike. The next year, 1922, it stood at 14.3, and the next highest figure was 12.5 in 1926, the year of the coal dispute and general strike; but persons put out of employment by reason of the coal disputes were not included in the percentage figures.

It is surely significant that the net reduction in rates of wages recorded under these conditions was less than in any year since 1926. It is now unnecessary to repeat that the statistics in *The Labour Gazette* are not representative, as large classes are excluded, but the changes in rates of wages were an increase of about £57,800 in the weekly full-time rates of 760,000 workpeople and a reduction of about £115,800 in the full-time wages of 1,100,000 workpeople, the net result being a decrease of about £58,000. The principal increases occurred in transport, including the railway employees, owing to a deduction of 2½ per cent. operative since 1928 ceasing to have effect from May, 1930; an increase also occurred in the railway engineering shops and in shipbuilding. Among the decreases the textile industry heads the list, and next comes building and public works. Other variations either way were small in amount.

In hours of labour, 357,000 workpeople were affected by changes, 12,550 having an increase of rather under an hour a week, and 344,000 an average reduction of about 2½ hours a week, the reductions in hours being mainly due to the Coal Mines Act. In some districts the reduction amounted to 4 hours per week in coal mines.

In the November number of *The Labour Gazette* there are charts illustrating the course of trade, output, prices, wages, finance, and employment, and the most remarkable feature of those charts, which cover a period 1924-1930, is the downward curve in wholesale prices since 1924, and in average values of British manufactures, whilst wages, on the other hand, have continued during the whole period, with trifling variation, on the line taken as the standard 100 in 1924, never falling appreciably below it. Hours of labour are not shown in the charts, but *The Labour Gazette*, January, 1931, states that since the widespread reductions in the years 1919-1920 they have remained practically unchanged, apart from the year 1926, which showed an increase, and 1930, which showed a decrease, both these fluctuations being connected with the mining industry. We will refer to the cost of living in detail below, but, with certain fluctuations, it has fallen from 75 per cent. above the 1914 level in 1916, to 58 in 1930, if all items of working-class expenditure are included.

It is not open to question that between the year 1924 and the present year both taxes and rates show a considerable increase. Taking all these factors into consideration, it surely is a testimony to our system that the rates of wages have been so nearly maintained at the same level. Whether we are putting too great a strain upon our system, and whether general sacrifices are not called for all round in order to restore employment and trade to healthy conditions are different questions, but, in considering any question of wages, the cost of the social services must not be lost sight of.

There were abnormal fluctuations in the cost of living during the year 1930. The percentage increase in 1929 above the 1914 level was 64 on the average for all items, and the figure for the year 1930 is 58.

The figures relating to rents since 1929 include decontrolled rents, and, of course, rates. The average rents thus calculated in 1929 were 52 per cent. above the 1914 level, and in 1930 they were 54 per cent. The *Gazette* attributes this rise of 2 per cent. to decontrol, but we dealt with this question at some length last year, and intimated that it would be well if the rents could be quoted with the rates deducted, as the variation in the amount of the rates renders it very difficult to apportion the increase to decontrol with certainty.

The figures relating to trade disputes were satisfactory. There were 415 disputes, involving about 287,300 workpeople directly and 20,300 indirectly, but two disputes, one in the textile industry and the other in coal-mining, accounted for about two-thirds of the workpeople involved; and, as regards loss of time, the former accounted for three-quarters of the total loss in working days. The loss in working days was 4,400,000, as compared with 8,290,000 in the previous year. It may be noted that the Trade Disputes and Trade Unions Act was passed in July, 1927, and it has recently been described as a source of strife; but the figures as to disputes by no means appear to support this contention. In 1927 the loss of working days was 1,170,000, and in 1928, 1,390,000, and for anything to compare with such low figures we have to go back to 1904. In 1929, as stated above, the loss of working days was 8,290,000, but 6½ million days were due to one dispute in the spinning and manufacturing industry of Lancashire.

On this occasion we have omitted any mention of the building industry, as this was the subject of a special article in our issue for January 9.

HOUSING AND BUILDING EXHIBITION, EDINBURGH

The sixth annual Housing and Building Exhibition, Edinburgh, was opened on January 28 at the Waverley Market by the Lord Provost Whitson, Mr. John Begg, F.R.I.B.A., presiding. The Corporation of Edinburgh, said the Lord Provost, as well as those of all other large towns, was, of course, deeply interested in housing schemes, and just recently had decided to embark upon a policy of erecting 1,500 houses per annum for the next three years. This was the sixth annual Housing and Building Exhibition organised by Mr. Percy Bentley, and it marked another important step in the usefulness which that event had become to the architectural profession and building trades in Scotland, and more particularly to those employed in the industry in that city.

The Exhibition, continued the Lord Provost, was inaugurated in the year 1926. As each exhibition had come round since then, the policy of restricting all exhibits to the building and allied trades had been more and more apparent, a distinctiveness which other exhibitions often lacked.

The Exhibits.

We give a review of some of the principal exhibits.

On Stands 4 and 5, Row A, "The Builder," Ltd., Catherine-street and York-street, Aldwych, London, W.C.2, display the current issues of *The Builder*, the journal for the architect and constructor. Published every Friday, price 9d., the newspaper contains, as is well known, the most complete lists of contracts open and of tenders accepted, besides advance news of proposed building work. For the architect, the cream of current architecture is illustrated and described, and a number of valuable articles from well-known writers will be found of particular use. Architects engaged in cinema or theatre work will be interested in a series, "The Architecture of the Theatre in America"—from the pen of Mr. E. Wamsley-Lewis, A.R.I.B.A., joint architect of the New Victoria cinema, London. On the Stand also will be found copies of *Architecture*. Each issue of this magazine is devoted to a single class of building, and completely deals with the subject in plans, illustrations and authoritative articles. Such numbers as "Cinemas," "Shop Fronts," "Cottages," "Hospitals," "Banks," "Town Halls," "Flats," etc., are still in stock. Also displayed are books as "Old London, Illustrated," "Designs for Houses," "Bungalows of To-day," "Estimating for Builders," and a comprehensive selection of publications and text books devoted to architecture and building.

Architects and engineers will be interested in a new system of construction known as "Ogmensteel," which is being exhibited for the first time at Stand 17, Row B, by Messrs. Carson & Gillies, 116, Hope-street, Glasgow. This new system, it is claimed, combines all the advantages of structural steel and reinforced concrete, resulting in a saving of 46 per cent. in weight of steel required. According to the existing by-laws of the local authorities, all steel-framed structures must be encased in concrete, itself a load-carrying agency, for fire protection. "Ogmensteel," after much theorising and practical tests, has been designed to combine the load-carrying capacities of both the concrete and steel, thereby reducing the dead weight and proving economical in construction. Further, since the initial structure is a built-up steel frame, the shuttering is supported directly by the steelwork, so that no supports or propping are required, as is the case for reinforced concrete structures; and, as the framework or pre-erected reinforcement is manufactured before despatch to the site, it is rigid, self-supporting and self-aligned, thus eliminating all the setting-out at site which is necessary for reinforced concrete structures. All the bar reinforcements are rigidly attached to the framework and cannot become displaced during the pouring of the concrete, thus ensuring that all steel will be operating to the purpose for which it was designed, a point which will be appreciated by architects and engineers engaged on constructional works. Several contracts have already been carried out in this steel (particulars of which, together with photographs, are exhibited at the stand), and we are told that structures in "Ogmensteel" have been approved by all local authorities wherever submitted, and also by the Ministry of Transport.

Modern Decoration.

Messrs. John Line & Sons, Ltd., 16, Picardy-place, Edinburgh, have made Stand 18, Row B, expressive of the modern trend of simplicity in design and general treatment of interior decoration. The exhibit demonstrates the possibilities of wallpaper when originality and imagination are brought to bear during every stage of design and manufacture. Walls demand primary consideration as being the background to any furnishing scheme, and the wealth of papers of novel textures and tasteful designs manufactured by Messrs. John Line under the general name of "Studies in Harmony," and shown on this stand, should attract the attention of every architect and home-lover. Another feature of the exhibit is the selection of fine colours and finished paints made by the firm. These are guaranteed to be pure of vehicle and pigment and to be relied upon as suitable for the purposes for which they are recommended.

Woodworkers and contractors who like to manufacture their own joinery should pay a visit to Stands 19 and 20, Row B, where Messrs. Guilliet, Sons & Co., of 13a, Finsbury-square, London, E.C.2, are showing a selection of their up-to-date woodworking plant. An interesting machine is the improved chain and hollow-chisel mortising machine, DGP. This is fitted with an improved type of drive, a rise-and-fall table, and with instantaneous stopping clutches on each tool. Another machine is the improved planing and thicknessing machine, LKC, fitted with an improved type of rising-and-falling table, ball-bearing cutter block, machine-cut gears and indestructible clutch. This is made in five sizes, from 16 in. to 32 in. A selection of other plant for planing, sawing and moulding makes this stand worth every woodworker's attention.

A departure in shop-front construction is to be seen in the stand at Row B, No. 21, of the Patent Tubular Shopfitting Co., of 54, Glover-street, Birmingham. Bronze metal has been used in the "Etherton" patent tubular system to construct the front, a method which departs from the practice of constructing this type of front with a wood core. This front on the stand is built with 18-gauge bronze metal in tubular form, fitted with internal castings in all angles, and is thus very quickly constructed, making a clean job with watertight and permanent mitres. The firm also draws attention to the adaptability of this system for the production of bronze casements and ornamental panels to replace extruded metal. A selection of showcases, fire-surrounds, balustrading, etc., are also on view.

Ironfounding.

The stand of the Carron Company, Stirlingshire, will be found to be full of interest, embodying as it does many of the latest developments in the art of the ironfounder. Three types of the "Carronia" combination grate are on view here (28 and 29, Row B), showing this popular grate complete with kerb and tiles. A familiar range in many Scottish homes—the "Holyrood"—is displayed with tiled covings and plain oven door—while the "Imperial" and "Beetonette" ranges are also to be seen, the latter being enamelled mottled black and white. Fire grates in various styles include back boiler grates—where one fire warms the room and heats the water in the boiler—and mantel registers. A hob register with tiled covings is fitted in a suitable mantel which is finished enamelled in imitation of grained oak. Three interior grates in a new fabric finish will have a special appeal for their beauty. Fireplace suites complete for dining-room, lounge, etc., are also included. Several baths are shown, in which the fittings are chromium plated, these being unaffected by steam. Architects for housing schemes will find of particular interest the "Stenhouse" combination bath and basin, which is indispensable where bathroom space is limited. Carron electric cooking and heating appliances displayed include cookers, fires, irons, etc. Among the variety of fires shown is the company's latest—the "Blake." This fire is a very near imitation to a live coal fire. Among gas heating and cooking appliances is a cooker fitted with the "Carrontrol" temperature regulator, which regulates and maintains temperature of oven to any degree required and permits different kinds of food being cooked at one time. The stand is surrounded by structural ironwork, manufactured and erected by the Carron Company. Altogether there are many points of interest to be found of value to every architect and builder.

Steel Scaffolding.

Those who have observed the growing popularity of steel scaffolding—its mobility, strength, ease of erection and lasting qualities—will find a demonstration of these merits on Stand 30, Row C, where Scaffolding (Great Britain), Ltd., of London and West Saville-terrace, Newington, Edinburgh, are holding a display. They are contractors for the erection of every description of scaffolding and stagings, but, besides, the firm are manufacturers of tubular scaffolding; the "Scaffixer" scaffold tie; the adjustable "Tube-shor" support; the adjustable "Splithead" support, etc. Suspended scaffolding is also a speciality. This scaffolding is particularly suitable for steel-frame buildings and is mechanically raised or lowered. Those interested in the system of steel scaffolding can see the plant in operation at the Royal Scottish Museum, and we learn that, upon application, a representative will gladly conduct over this and other local contracts.

On Stand 44, Row C, Messrs. James W. Southern & Son, Ltd., of 32, Store-street, Manchester, are making a special display of the English-made "British Sasco" Columbian pine door. This is displayed and marketed in a wide variety of patterns, all of which are well finished and of good appearance. They have been used, we learn, by many public authorities, such as the Corporations of Edinburgh, Glasgow, Perth and Stirling, and the Burghs of Peebles, Galashiels, etc. Plywood is another speciality exhibited by this firm, and a varied selection of Oregon pine, Latvian and Russian birch, Gaboon mahogany, oak, etc., panels are on view.

Builders on the look out for builders' plant should not miss Messrs. Drew, Clark & Co.'s Stands, Nos. 56-59, Row E, on which are displayed "Diamond" patent extension ladders, "Rap-Rig" patent scaffolding for interior decorating, patent combined ladder and steps, "push-up" extension ladders, and a general variety of ladders, steps and trestles for all purposes. Builders who require reliable plant should not miss this stand.

Ballast, Sand and Allied Trades Association.

The following resolution was passed by the Central Committee of this Association at a meeting held on the 12th instant:—

"That this Committee withdraws the 5 per cent. certified allowance towards consolidation in transit, and the basis of measure, on and after February 2, 1931, shall be Association loading line at the pit. The condition referring to the 5 per cent. on the Association pink ticket shall, on and after that date, be deleted."

NEW BUILDINGS IN LONDON

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned. Items should be received at THE BUILDER *Office not later than Tuesday evening.*

Bermondsey.—DWELLINGS.—Messrs. J. E. Billings & Co., Ltd., Victoria-street, S.W.1, are erecting dwellings on the Dickens estate, Bermondsey, for the L.C.C. The work will cost £18,880.

Bermondsey.—HALL.—A new church hall is to be erected at Snowfields, for the trustees of the Roman Catholic Diocese of Southwark. Particulars from Rev. A. P. Flanagan, 14, Melior-street, Bermondsey.

Blackstock-road, N.5.—REBUILDING.—Plans have been approved for the rebuilding of the "Bank of Friendship" public-house at No. 226. Plans by the staff architect to Messrs. Courage and Co., Ltd., brewers, Horselydown, S.E.1. The estimated cost is £8,000.

Bow.—SCHOOL.—The L.C.C. have accepted the estimate of Messrs. Patman & Fotheringham, Ltd., Park-street, Islington, N., at £16,123, for the erection of elementary school and a schoolkeeper's house on Back-alley site.

Camberwell.—REBUILDING.—Messrs. F. and H. F. Higgs, Ltd., Station Works, Hinton-road, S.E.24, are engaged upon the erection of a block of shops and offices at 361-363, Old Kent-road. The architect is Mr. M. K. Matthews, 72, Tottenham Court-road, W.1.

Chiswick.—HOUSES.—For the erection of 255 houses on Syon-lane housing site, the Chiswick and Brentford U.D.C. has accepted the estimate of the Grosvenor Construction Co., 56, Buckingham-gate, Westminster, S.W.1. Mr. Edward Willis is the Council's engineer.

Chiswick.—ADDITIONS.—For alterations and additions to the County School for Boys, the Middlesex C.C. has given Mr. W. Lacey, of Hounslow, the contract. The tender price is £2,276. The County Architect is Mr. W. T. Curtis, F.R.I.B.A., 10, Great George-street, S.W.1.

Dagenham.—EXTENSIONS.—Messrs. Taylor, Walker & Co., Ltd., brewers, have leased a site in Church Elm-lane for extensions to the "Church Elm" beerhouse.

Dean-street.—REBUILDING.—A block of business premises is to be erected at 36-38. Plans by Mr. G. Gordon Stanham, F.R.I.B.A., 26, Bush-lane, E.C.4.

Deptford.—ALTERATIONS.—Messrs. T. D. Leng, of Czar-street Works, Deptford, S.E.8, has secured the contract for alterations to the employment exchange, for H.M.O.W.

Finchley.—ALTERATIONS.—Alterations are being carried out at the Finchley Tramways depot, for the Metropolitan Electric Tramways, Ltd., 55, Broadway, S.W.1. The contract is with Messrs. Allen Fairhead & Sons, Ltd., Sydney-road, Enfield.

Fleet-street.—OFFICES.—Premises at the corner of Fleet-street and Whitefriars-street are to be demolished by Mr. H. J. Moyes, 255, Clapham-road, S.W.9, preparatory to rebuilding on the site. An office building will be erected by Messrs. Allen Fairhead & Sons, Ltd., Sydney-road, Enfield.

Fulham.—REBUILDING.—The "George" public-house, 506, Fulham-road, is to be rebuilt by the owners, Messrs. Watney, Combe, Reid and Co., Ltd., Stag Brewery, S.W.1. The estimated cost is £13,000.

Hackney.—ALTERATIONS.—Messrs. E. A. Roome and Co., Ltd., of Hackney, are carrying out alterations, etc., to Messrs. Grahame's premises at 306-312, Mare-street, E.8, under the supervision of Mr. Dudley P. Hayworth, A.R.I.B.A., 27, Clements-lane, Lombard-street, E.C.4.

Greenwich.—FACTORY.—Revised plans are being prepared for a factory for Messrs. Field and Co. (Fruit Merchants), Ltd. The architects are Messrs. Storrar and Hunt, Clock-chambers, London-road, Enfield.

Hampstead.—FLATS.—Several blocks of flats are to be erected on an estate known as Lyttelton-court in Lyttelton-road, N.W.11. Plans by the architectural staff of Messrs. Coparts, Ltd., Temple Fortune House, Hampstead Way, N.W.11, who are carrying out the building.

Hendon.—INSTITUTION.—The John Groom's Crippleage and Flower Girls' Mission (Incorporated), of Sekforde-street, Clerkenwell, E.C.1, are to build a new institution in North Circular-road. Plans by Messrs. W. H. Woodroffe & Son, 5, Bedford-row, W.C.1. The building contractors are Messrs. Thomas and Edge, Station-chambers, Cross-street, Woolwich.

Hendon.—FLATS.—A scheme is under consideration for development of land in Vivian-avenue and Crespigny-road, by erection of shops and flats. Plans by Messrs. C. Eprile, A.R.I.B.A., and P. V. Burnett, A.R.I.B.A., 107, Jermyn-street, S.W.1.

Hyde Park Corner.—SUBWAY.—Messrs. Mott, Hay & Anderson, 9, Iddesleigh House, Caxton-street, S.W.1, are the engineers to the London Electric Railway Co. for the subways at Hyde Park Corner and Dover-street stations.

Islington.—FACTORY.—A site in Ball's Pond-road has been cleared preparatory to the erection of new factory buildings. The contractors are Messrs. A. J. King, Ltd., 60, Southgate-road, Islington.

Kennington Park-road.—RECONSTRUCTION.—Messrs. William F. Blay, Ltd., 30a, Spital-street, Dartford, are engaged upon the reconstruction of residential property which had become unsafe. Plans by Messrs. Dann and Lucas, 25, Budge-row, E.C.4.

Kensington High-street.—FLATS.—Messrs. Morris Estates, Ltd., Dorland House, Regent-street, S.W.1, are to build 23 shops and about 150 flats. The building will be six storeys high. The site is between Argyll-road and Phillimore-gardens, High-street, W.8. The plans are by Mr. H. J. Palmer, of Dorland House, S.W.1, and the demolition work is by Messrs. T. Watts and Son.

Kew.—EXTENSIONS.—For extensions at the Royal Botanic Gardens, H.M.O.W. are inviting tenders.

Kilburn.—ALTERATIONS.—Messrs. G. A. Sexton and Son, 42, High-road, N.W.6, are preparing plans for alterations at the "Volunteer" public-house, 77, High-road, N.W.6.

Kingsbury.—BUILDING.—The Middlesex C.C. have placed contracts with Messrs. J. Laing & Son, Ltd., Mill Hill, for the erection of the new county school in Princes-avenue, at £43,638, and an elementary school in Bacon-lane, North Kingsbury, with the same firm, at £19,142. Mr. W. T. Curtis, F.R.I.B.A., 10, Great George-street, S.W.1, is the County Architect.

Lombard-street.—REBUILDING.—Messrs. Greenham Demolition Co., Ltd., London-road, Isleworth, are engaged upon the demolition of the old headquarters of Glyn, Mills and Co., bankers, at 67. Sir Herbert Baker, A.R.A., 14, Barton-street, S.W.1, has prepared plans for the rebuilding.

Notting Hill-gate.—PREMISES.—Messrs. Boots, the Chemists, are to have new premises erected on a site in High-street. Plans by the company's staff architect, Mr. P. J. Bartlett, Station-road, Nottingham.

Peckham.—EXTENSIONS.—Messrs. Hillier, Parker, May and Rowden, 27, Maddox-street, W.1, have prepared plans for extensions at the premises of Messrs. H. Holdron, Ltd., Rye-lane.

Piccadilly.—ALTERATIONS.—Messrs. Beresford Pite & Partners, architects, 101, Gt. Russell-street, W.C.1, have submitted plans to the Westminster City Council for alterations to the entrance to the Burlington Arcade. Messrs. James Carmichael (Contractors), Ltd., 331, Trinity-road, S.W.18, are the builders.

Piccadilly.—DEVELOPMENT.—The British Trust and Banking Corporation, Ltd., 31, London Wall, E.C.2, have acquired premises vacated by the Bachelor's Club, and intend acquiring neighbouring property in order to carry out a rebuilding scheme.

Plaistow.—EXCHANGE.—H.M.O.W. are inviting estimates for the new telephone exchange to be known as "Plashet" Exchange.

Regent-street.—ALTERATIONS.—Extensive alterations are being made at 211 to 213, Regent-street, W.1. Messrs. Henry Tanner, of 3, Hanover-square, W.1, are the architects, and the contract has been placed with Mr. Charles R. Price, of 107, Bishopsgate, E.C.2.

St. Pancras.—PREMISES.—The Avon India Rubber Co., Ltd., 343, Euston-road, N.W.1, are to erect new premises at the corner of Mabledon-place and Flaxman-terrace. The main contract has been let to Messrs. Wilson Lovatt and Sons, Ltd., Abbey House, Victoria-street, S.W.1, and the steel contract to Messrs. Banister, Walton and Co., Ltd., Ashburton-road, Trafford Park, Manchester. Plans by Messrs. Wallis, Gilbert and Partners, 29, Roland-gardens, S.W.7.

Southfields.—BUILDING.—Messrs. Wallis, Gilbert and Partners, 29, Roland-gardens, S.W.7, prepared plans for erection of buildings for Messrs. The Aluminium Plant and Vessel Co., Point Pleasant, Southfields.

Southwark.—WAREHOUSE.—Mr. E. J. Williams, 13, New-street, Leicester, has prepared plans for a warehouse on the site of 13-16, Borough-road, and 36-37, Onecote-street, S.E.1.

Spitalfields.—EXTENSIONS.—In connection with the paragraph which appeared in our last issue regarding the extensions that Messrs. Truman, Hanbury & Buxton, Ltd., Brick-lane, Spitalfields, are having built at their brewery premises, we understand that Mr. A. R. Robertson, F.R.I.B.A., architect to the brewery, has prepared the plans, and not as stated last week. The building contract has been let to Messrs. Prestige & Co., Ltd., 149, Grosvenor-road, S.W.1.

Stratford.—EXTENSIONS.—Alterations and additions are to be made to the premises of Messrs. Rumsey and Co., furnishers, Leyton-stone High-street. The work is being carried out by Mr. H. E. Jerram, Sandford-road, E.6, to plans by Mr. A. C. S. Wheeler, 23, Salisbury-road, Forest Gate, E.7.

Three Mile-lane, E.—LABORATORY.—Messrs. Kemball, Bishop and Co., of Crown Works, Bromley, E.3, are to have a new laboratory erected. Mr. R. C. Fry, F.R.I.B.A., 12, Clifford's Inn, E.C.4, has been appointed to prepare plans.

Tottenham.—IMPROVEMENTS.—The L.C.C. recommend £11,030 in respect of fire precautionary measures at North-Eastern Hospital, St. Ann's-road, N.15.

Twickenham.—FLATS.—A scheme has been proposed for the development of the site of the Sion-road depot, Sion-road. This scheme, which is under consideration by the Council, provides for the erection of 150 high-class flats. Messrs. Knott and Collins, 14, John-street, W.C.2, are the architects.

Wandsworth.—SCHOOLS.—The B.C. have received notice from the L.C.C. for new public elementary schools to accommodate 400 children at Streatham-hill, and 500 children at Clapham-park.

Westminster.—ADDITIONS.—Messrs. Mitchell & Bridgwater are the architects for additions to premises in Glasgow-terrace.

Westminster.—BUILDING.—Premises are to be erected on an 8-acre site, known as the Grosvenor Estate, Millbank. The land has been purchased by Associated London Properties, Ltd., St. Ermins, Caxton-street, S.W.1.

L.M.B. Sports Association.

We give below results and table of the Football League of this Association up to Saturday, January 31 :—

RESULTS.

Downs	...	...	3	Higgs	...	... 8
Scafco	...	...	3	Portland	...	... 0
Trocoll	...	...	2	Wills	...	... 6

TABLE.

	P.	W.	D.	L.	Goals. F.	A.	Pts.
Wills	... 14	12	2	—	73	14	26
Scafco	... 15	10	—	5	33	22	20
Portland	... 15	8	3	4	36	30	19
Trocoll	... 13	8	2	3	65	20	18
Higgs	... 12	5	2	5	43	33	12
Downs	... 16	—	2	14	13	72	2
Elsilrac	... 13	—	1	12	8	80	1

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st FEBRUARY, 1931.

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Masons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Accrington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Aldershot	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Alfreton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Alnwick	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Altrincham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ashford (Kent)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Ashington	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Ashton-under-Lyne	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Aylsham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Barnstaple	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Barrow-in-Furness	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Barry	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/0
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0½
Bath	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bedford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Berwick	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bexhill	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Birkenhead	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Birmingham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bishop Auckland	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Blackburn	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Blackpool	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bognor Regis	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bolton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bournemouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bradford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bradford-on-Avon	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Braintree	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0
Brentwood	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bridgwater	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bridlington	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Brighton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Bristol	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromsgrove	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bromyard	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Bungay	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Burnley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Burton-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bury St. Edmunds	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Buxton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Cardiff	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Carlisle	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chatham	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Chelmsford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Cheltenham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chesterfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Chorley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cirencester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Clacton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Coventry	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Cranbrook	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Crewe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cromer	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11
Darlington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Deal	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Denbigh	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Derby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Devizes	1/3	1/3	1/3	1/3	1/3	1/3	1/2	11½
Dewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Doncaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dorchester	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Dorking	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Dovercourt	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Driffield	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Droitwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Dudley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Durham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Eastbourne	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
E.Glam.(Mon.Val.)	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ely	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Exeter	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Exmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Fakenham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Felixstowe	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Folkestone	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Frome	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	11½
Glossop	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gloucester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Godalming	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Goole	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Gosport	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grantham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Gt. Yarmouth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Grimsby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Guildford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Halifax	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Harpenden	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Harrogate	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hartlepools	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Harwich	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hastings	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Hatfield	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hednesford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Hereford	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Herne Bay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Huddersfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hull	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hunstanton	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huntingdon	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Isle of Wight	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Ipswich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Keighley	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Kettering	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Kidderminster	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Kings Lynn	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Lancaster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2

	asons.	Bricklayers.	Carpenters Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Leamington Sp	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Leeds	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leicester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leighton Buzzard	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Lichfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Lincoln	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Littlehampton	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Liverpool	1/8½	1/8½	1/8½	1/9½	1/8½	1/8½	1/8½	1/3½
Llandudno	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Llanelly	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
London—								
12 m. radius	1/8	1/8	1/8	1/8*	1/8	1/8	1/7	1/3
12-15 m. radius	1/7½	1/7½	1/7½	1/7½*	1/7½	1/7½	1/6½	1/2½
Loughborough	1/5	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lowestoft	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Luton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Macclesfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Maidstone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Malvern	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Manchester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Mansfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Margate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Market Harborough		1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Matlock	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Melton Constable	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Melton Mowbray	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Merthyr Tydfil	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Middlesbrough	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Newark	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Newbury	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Newcastle-on-Tyne	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Newcastle-u-Lyme	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
New Forest	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Newmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newport, Mon.	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Northampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Norwich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Nottingham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Nuneaton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Oldham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Oxford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Paignton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Peterborough	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/2
Plymouth	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Pontypridd	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Portsmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Preston	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Ramsgate	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Reading	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Redcar	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Redditch	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Reigate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Retford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Ripon	1/5	1/5	1/5	1/6½	1/6½	1/6½	1/6½	1/2
Rochdale	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Rochester	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Rugby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Saffron Walden	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
St. Albans	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
St. Helens	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Sawbridgeworth	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Saxmundham	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
Scarborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sevenoaks	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sheffield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Shrewsbury	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Sittingbourne	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Southampton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
South Shields	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stevenage	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Stockport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stockton-on-Tees	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stoke-on-Trent	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourbridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stourport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Stowmarket	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Stratford-on-Avon	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Stroud	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Sunderland	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Swaffham	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Swansea	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Tamworth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Taunton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Thetford	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Torquay	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Trowbridge	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Tunbridge Wells	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Uttoxeter	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wakefield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Walsall	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Walsden	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warminster	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Warrington	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Warwick	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wells (Norfolk)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	10½
Welwyn Gar. City	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
West Bromwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Weston-sup-Mare	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weymouth	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Whitby	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wigan	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Winchester	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Windsor	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wisbech	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wolverhampton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Woodbridge	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Worcester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Worksop	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Worthing	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Wrexham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wycombe	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wymondham	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11
York	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2

* The rate recognised by the National Association of Plasterers, Granolithic and Cement Workers, as and from the 1st February, 1931, will be 1/10½ per hour.

For Building Trade wages in Scotland, see page 301.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders, and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

FEBRUARY 9.

Basford.—Painting.—External of 88 Council houses, for R.D.C. S. Maylan, E. and S.

Bootle.—Centre.—Health centre on south side of Knowsley-rd., in North Recreation Ground, for C.B. B.E. Dep. £2 2s.

Chiswick, W.4.—Stalls.—Erection of two new stalls at Wholesale Market, High-rd., Chiswick, for Brentford and Chiswick U.D.C. Edward Willis, E. and S., Town Hall, Chiswick, W.4. Dep. £2.

Culham.—Houses.—3 pairs at Drayton St. Leonard, for R.D.C. A. B. West, F.R.I.B.A., architect, The Knowl, Abingdon. Dep. £2 2s.

Currock.—Hall.—Church hall. J. H. Martindale, F.R.I.B.A., architect, Carlisle.

East Barnet.—School.—New County Council school at Cromer-rd., East Barnet Valley, for Hertfordshire County Council. A. Ernest Prescott, County Surveyor and Architect, County Surveyor's Office, Hatfield, Herts. Dep. £2 2s.

England.—Foundations.—Construction of site works, foundation works and buildings at Wigan and Southport, in area of North-West England and North Wales Electricity Scheme, for Central Electricity Board. R. H. Fox, secretary, Trafalgar Buildings, 1, Charing Cross, W.C.2. Dep. £2 2s.

***Erith.**—New Council offices.—Erection of, at the junction of Bexley-rd. and Walnut Tree-rd., for the U.D.C. Harold Hind, Engineer and Surveyor, Council Offices, "The Oaks," Belvedere. Dep. £5 5s.

Evesham.—Houses.—20 non-parlour type in Avon-st., for T.C. B.S., Municipal Offices, High-st., Evesham. Dep. £2 2s.

Glanford Brigg.—Houses.—Messingham, 12 non-parlour type; and Wrawby, 10 non-parlour type, for R.D.C. Housing Surveyor. Dep. £2 2s.

Glasgow.—Ironmongery.—Work at Cloberhill school, Knightswood, for T.C. D. Stenhouse, T.C. Dep. £1 1s.

Halifax.—Houses.—14, at Moor End-rd., for C.B. A. C. Tipple, B.E., Crossley-st. Dep. £1 1s.

Littleborough.—Painting.—Also decorating of Primitive Methodist Church, Shore. J. T. Mitchell, 62, Shore-rd., Littleborough.

London, S.E.17.—Painting and Repairs.—Exterior and interior and repairs to roof at the Newington Institution, Westmoreland-rd., S.E.17 for L.C.C. Chief Engineer, Old County Hall, Spring Gardens, S.W.1. Dep. £1 by cheque.

Manchester.—Asphalt.—Covering with rock asphalt of flats to laundry roofs at Withington Hospital and Institution, Nell-lane, West Didsbury, for T.C. Superintendent of Works, Public Health Department, Public Assistance Offices.

Manchester.—Building.—Boiler-house at Queen's-rd. bus garage, for T.C. City Architect. Dep. £1 1s.

Newcastle-upon-Tyne.—Sports Pavilion, etc.—At Exhibition Park, for City and County. City Engineer, Town Hall, Newcastle-upon-Tyne. Dep. £2 2s.

Poole.—Houses.—Three pairs of semi-detached houses at Wimborne-rd., Lytchett Matravers, for R.D.C. W. H. Parham, S., Blandford-rd., Broadstone.

Portsmouth.—Building.—Tea-house, east of South Parade Pier, for T.C. R. J. Jenkins, City E. Dep. £2.

Preston.—School.—New senior school in Frenchwood-av., for C.B. W. Platt, B.E. and S., Birley-st. Dep £2.

Ramsgate.—Platform.—Reinforced concrete bathing platform on Marina Esplanade, for T.C. T. G. Taylor, B.E., 16, Albion-place.

Reading.—Decorating.—Internal decorations to 156 houses on Oxford-rd. housing estate, for C.B. Housing Architect, Municipal-bldgs., St. Laurence's Churchyard.

Seaham Harbour.—Pavilion.—Erection of a new pavilon for 50 patients and staff annexe at Seaham Hall Sanatorium, Seaham Harbour, Co. Durham, for Durham C.C. William J. Merrett, C.S., County Surveyor's Office, 43, Old Elvet, Durham.

Surbiton.—Swimming Bath.—Construction of open-air bath, for U.D.C. Clerk, Council Offices, Surbiton. Dep. £3 3s.

Thorne.—Additions.—Also alterations to police station, nr. Doncaster, for West Riding C.C. West Riding Architect, County Hall, Wakefield.

Wath-upon-Dearne.—Conversion.—Of privies into water closets with necessary drainage at 100 houses in Beech-rd. and Avenue-rd., for U.D.C. H. Tayler, sanitary inspector.

FEBRUARY 10.

Cossley.—Conversions.—Privy conversions, for U.D.C. G. Edwin Mitchell, S.

Cleburn.—Building.—Two new farmhouses and sets of buildings and adaptation of four existing farms at Stirk House estate, for West Riding C.C. County Land Agent, County Hall, Wakefield. Dep. £1.

Gosforth.—Houses.—Twelve, on Kenton-rd. North housing estate, for U.D.C. George Nelson, A.M.I.C.E., Architect to the Council, Council Chambers, Gosforth. Dep. £2 2s.

Greenwich, S.E.—New Storey.—For H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Ireland.—Building.—Station for the Garda Siochana at Kilmeedy, Co. Limerick; national school at Corbally, Co. Tipperary; and enlarging Rathkell National school, Co. Mayo, for Commissioners of Public Works. T. Cassedy, secretary, Dublin. Dep. £1 each.

London.—Wiring.—Also fittings for electric lighting for public staircases, etc., in 16 blocks of tenement dwellings situated in Stepney and Poplar, for L.C.C. Chief Engineer, Old County Hall, Spring-gardens, S.W.1. Dep. £1.

Richmond (Surrey).—Demolition.—Of thirteen shops in Kew-rd., Richmond, for Surrey C.C. C.S., Kingston-on-Thames. Dep. £2 2s.

Rochdale.—Demolition.—Of dwelling-houses, 8, 10 and 12, Bell-st., for T.C. B.S.

Romford.—New Council School.—For the Essex C.C. County Architect, Springfield Old Court, Chelmsford. Dep. £2 2s.

Truro.—Housing.—Repairs to 85 various houses, for R.D.C. Coulter Hancock, Clerk to the Council, 12, Princes-st. Dep. £1 1s.

Upminster.—Alterations and Additions.—To Council school, for the Essex C.C. County Architect, Springfield Old Court, Chelmsford. Dep. £2 2s.

Wombwell.—Conversion.—Into water closets of 101 privies, for U.D.C. Sanitary Inspector.

FEBRUARY 11.

Edinburgh.—Installation.—Heating and shop fronts, for technical and commercial school, Bellevue, for T.C. E. J. MacRae, A.R.I.B.A., City Architect.

Leicester.—Abattoir.—Public abattoir, Aylestone-rd., for T.C. R. Stephen Ayling, F.R.I.B.A., F.R.S.I., London, and Albert Herbert, F.R.I.B.A., Leicester. Dep. £2 2s.

Manchester.—Additions.—Additional firemen's quarters and alterations to existing quarters at (1) New-st. fire station, Miles Platting, and (2) Ash-st. fire station, Harpurhey, for T.C. City Architect. Dep. £2 2s.

Mortlake, S.W.—Extensions.—To sorting office, for H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Stockport.—Building.—Polling booths, etc., for C.B. H. Hamer, B.S.

Swansea.—Installation.—Electrical lighting, etc., at new buildings of Technical College, Mount Pleasant, for C.B. E. R. Morgan, A.R.I.B.A., Borough Architect, 3, Prospect-pl. Dep. £2.

***Truro.**—Toll Houses.—Waiting-rooms and other works at or near the Ferry Beach, Torpoint, for the Cornwall C.C. L. Pool, C.A., County Hall, Truro Dep. £2 2s.

Wallasey.—Painting.—External painting, pebble-dashing, etc., of 9 houses, Waterloo-rd. and 4 houses, Marine-promenade, New Brighton, for C.B. B.E. Dep. £1 1s.

FEBRUARY 12.

Ashford, Middlesex.—Post Office.—For H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Brighton.—Rooms.—Erection of science and housecraft rooms at Park-st. school, for C.B. Thos. Simpson & Son, architects, 16, Ship-st., Brighton. Dep. £3 3s.

Crediton.—Housing Scheme.—Block of six houses at Lapford and a block of two houses at Black Dog, for R.D.C. E. Chell, Tors View, Barnstaple Cross, Crediton.

London.—Extensions.—To sub-station, Osborn-st., E.1, for Stepney B.C. B. J. Belsher, F.R.I.B.A., B.E. and S. Dep. £3.

Nottingham.—Houses.—528 and 36 flats on Valley-rd. and Hucknall-rd. estate, for T.C. E. Philips, Housing Architect, Exchange-bldgs. East. Dep. £1.

Tongue.—Housing.—3 blocks of semi-detached houses, for Sutherland C.C. Horne & Murray, architects, Golspie.

Woodstock.—Cottages.—Bladon, 6 pairs; Combe, 1 pair; Wootton, 1 pair, for R.D.C. C. W. Page, Oxford-rd., Kidlington. Dep. 10s. 6d.

FEBRUARY 13.

Bristol.—Houses.—Hillside-rd. housing site (St. George), 86 houses; Bedminster housing site, 168 houses; Shirehampton housing site, 1 workshop, for T.C. Lessell S. McKenzie, City Engineer and Surveyor, 51, Prince-st. Dep. £1.

Leyton.—Alterations.—Alterations and additions to Canterbury-rd. junior school. Jno. Atkinson, Town Clerk, Town Hall. Dep. £2.

Mexborough.—School.—Junior and infants' school, for West Riding E.C. Education Officer, County Hall, Wakefield.

Thorne.—Painting.—Thorne Goole-rd. senior girls', junior mixed, and infants' schools, also caretaker's house, for West Riding C.C. Education Officer, County Hall, Wakefield.

Twickenham.—Painting.—External and repairs to south front at York House, Richmond-rd., for T.C. Gilbert R. King, B.E. and S.

FEBRUARY 14.

Edinburgh.—Shop.—Formation of new pits in heavy repair shop, Shrubhill tramway depôt, for T.C. E. J. MacRae, A.R.I.B.A., City Architect.

Middlesex.—Internal Decorations.—To 194 houses at Northwood and Eastcote, for Ruislip-Northwood U.D.C. H. R. Metcalfe, B.E. and S., Council Offices, Northwood. Dep. £2

***Scarborough.**—Houses.—Erection of 124 non-parlour houses on the Northstead estate, for the T.C. Harry W. Smith, A.M.I.C.E., B.E., Town Hall, Scarborough.

FEBRUARY 16.

Beaconsfield.—Housing Scheme No. 3.—For erection of 108 non-parlour type houses and 16 parlour type houses on the Amersham-rd. housing site, for U.D.C. John H. Crosby, Engineer and Surveyor, Council Offices, Beaconsfield. Dep. £3 3s.

Brighton.—Rebuilding.—Of 169-174, Western-rd., 1-9, Marlborough-st. and 33-34, Crown-st., for Corporation T.C., Town Hall. Dep. £1 1s

***Moreton-in-Marsh.**—Housing.—Completing the erection of 12 partly built houses at Mickleton, for the Campden R.D.C. E. H. Earp, of Arrow, near Alcester.

Mytholmroyd.—Houses.—22, on Candene site, for U.D.C. T. Feather, S. Dep. £2.

Tynemouth.—School.—New Linskill senior Council school on a site in Trevor-terrace, North Shields, for Tynemouth C.B. W. Stockdale, F.R.I.B.A., Architect, 81, Howard-st., North Shields. Dep. £3 3s.

FEBRUARY 17.

Dover.—Fire Station.—Together with firemen's quarters, etc., in Ladywell, for Corporation. Wm. Boulton Smith, E. and S., Maison Dieu House, Dover. Dep. £2 2s

Dublin.—Cottages.—32 labourers' cottages, for Board of Public Health. F. P. Russel, E., 16, Westmoreland-st.

Kew and Plaistow, E.—Building Work.—Extension of the Herbarium, etc., at Royal Botanic Gardens; erection of "Plashet" Telephone Exchange, Plaistow, E., for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

Leeds.—School.—Proposed council schools for 1,360 children, Middleton, for E.C. Education Department (Architect's Section), Calverley-st. Dep. £1 1s.

Rochdale.—Painting.—Internal, at Smith-st. baths, for C.B. B.S.

FEBRUARY 18.

Port Talbot.—Lodge.—Lodge at Vivian-pk., Aberavon, and pavilion, for T.C. B.S.

FEBRUARY 20.

Abergorlech.—Hall.—Vicar, Abergorlech, Carmarthen.

***Chester.**—New Hostel.—Erection of, at Crewe Training College, new hostel for men students. F. Anstead Browne, F.R.I.B.A., County Architect, The Castle, Chester. Dep. £2 2s.

***Kent.**—Residence.—For an assistant medical officer at Barming, Kent, for the C.C. H. J. Bracher, clerk, 4, Earl-street, Maidstone. Dep. £2 2s.

FEBRUARY 21.

Wantage.—Houses.—Thirty-four houses, for R.D.C. J. W. Harris, architect, East Challow, Wantage. Dep. £2 2s.

FEBRUARY 23.

***Birmingham.**—Erection.—Of Ashfield telephone exchange, Walmley, for the Commissioners of His Majesty's Office of Works. Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

***North-East England.**—Site Works, Foundation Works and Buildings.—In the area of the N.E. England electricity scheme, for Central Electricity Board. Richard H. Fox, Secretary, Trafalgar-bldgs., 1, Charing Cross, London, W.C.2.

FEBRUARY 24.

Perth.—Abattoir.—Reconstruction of public abattoir, for T.C. T. M'Laren, B.E., 15, Tay-st. Dep. £1.

Swinton.—Conversion.—Of privies into water closets, for U.D.C. B. C. Bower, clerk. Dep. £1 1s.

FEBRUARY 25.

***Somerset.**—Extension.—Of the Post Office wireless station, Burnham-on-Sea, for the Commissioners of His Majesty's Office of Works, Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

FEBRUARY 26.

***Birmingham.**—Erection.—Of telephone exchange at Broadwell, for the Commissioners of His Majesty's Office of Works, Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

FEBRUARY 27.

***Brighton.**—Reconstruction.—Of the Head Post Office, for the Commissioners of His Majesty's Office of Works, Contracts Branch, King Charles-st., London, S.W.1. Dep. £1 1s.

FEBRUARY 28.

***Stafford.**—Elementary Day Schools.—In Coppice-lane, Quarry Bank, to accommodate 400 boys and 400 girls, for the Staffordshire E.C. F. A. Hughes, Director of Education, County Education Offices, Stafford. Dep. £10 10s., or £5 5s. for one school only.

***Stafford.**—Elementary Day School.—To accommodate 480 senior mixed children, at Manor-rd., Penn, Wolverhampton, for the E.C. F. A. Hughes, Director of Education, County Education Offices, Stafford.

MARCH 3.

***London, N.1.**—Demolition and Rebuilding.—Of Nos. 16, 18 and 20, Wharfdale-rd., King's Cross, London, N.1, for use as an electricity sub-station, for the Metropolitan B.C. of Islington. E. C. P. Monson, F.R.I.B.A., Finsbury Pavement House, 130, Moorgate, E.C.2. Dep. £2.

MARCH 17.

***Lancashire.**—Training College.—Erection of, at Edge Hill, Ormskirk, for the E.C. Stephen Wilkinson, F.R.I.B.A., County Architect, 16, Ribblesdale-place, Preston. Dep. £5.

NO DATE.

Cardiff.—Lighting.—Electric lighting, pumping station, Western District Sewer, Penarth-rd., for T.C. C. G. Brown, T.C. Dep. £1 1s.

Edinburgh.—Maintenance.—Of military buildings at Edinburgh, Glencorse, Dunbar, Berwick-upon-Tweed, Stobs, Forth Defences (including North Queensbury), Glasgow, Hamilton, Ayr, and Clyde Defences, for War Dept. J. T. Fisher, Lieut.-Colonel, R.E., Commander Royal Engineers Lowlands District, 29, Rutland-sq., Edinburgh.

***Gloucester and Kent.**—Demolition and Rebuilding.—Of shop premises, 4-5, High-st., Stroud, and additions, etc., to 99, West-st., Faversham, Timothy Whites (1928), Ltd. (Construction Dept.), 50, Chandos-st., Portsmouth.

Liverpool.—Demolition.—Of property in London-rd., Poisey-st., Hotham-st. and Lord Nelson-st. A. Ernest Shennan, F.R.I.B.A., architect, 14, North John-st.

Pontefract.—Houses.—Detached house at Whitley Bridge; detached house at Hensall; detached house at South Kirkby. Hustler & Taylor, architects, 25, Ropergate, Pontefract.

***Slough.**—Block of Shops and Offices.—In Slough, for George Cornish. Charles Bowyer, chartered surveyor, High-st., Leicester.

MATERIALS, etc.

FEBRUARY 9.

Coventry.—Road Materials, etc.—For T.C. E. H. Ford, City E. and S.

Farnham.—Granite, etc.—For U.D.C. L. H. Starling, E. and S.

Gainsborough.—Road Materials.—For U.D.C. S. W. Parker, E. and S.

Gosport.—Road Materials.—For T.C. B.E.

Grantham.—Road Materials.—For T.C. B.S.

Irlam.—Road Materials.—For U.D.C. H. Nurse, E. and S.

London.—Highway Materials.—For Bethnal Green B.C. A. E. Darling, B.E. and S.

London.—Granite.—Also sand, for Thames embankments and bridges and Blackwall and Rotherhithe tunnels, for L.C.C. Chief E., Old County Hall, S.W.1.

Surbiton.—Cement, etc.—For U.D.C. H. T. Mather, S.

Worthing.—Road Materials.—For T.C. P. R. Harvey, B.E. and S.

FEBRUARY 10.

Cardiff.—Highway Materials.—For T.C. City E.

Chorley.—Road Materials.—For R.D.C. W. Cotterill, S.

Egypt.—Paints and Painting Material.—For Egyptian Delta Light Railways, Ltd., Alexandria. General Manager.

Isle of Ely.—Highway Materials.—For C.C. R. S. W. Perkins, C.S., March.

Leeds.—Builders' Materials.—For T.C. J. E. Acfield, City E.

Manchester.—Paints, etc.—For Transport Dept. General Manager, 55, Piccadilly.

Norwich.—Highway Materials.—For T.C. J. B. Bullough, City E.

Sunderland.—Highway Materials.—For C.B. B.E.

Westmorland.—Tar and Bitumen.—For C.C. C. E. Hines, C.S., 12, Lowther-st., Kendal.

York.—Highway Materials.—For T.C. F. W. Spurr, City E.

FEBRUARY 11.

Burnley.—Road Materials.—For R.D.C. F. Hewitt, S., 18, Nicholas-st., Burnley.

Halifax.—Highway Materials.—For C.B. A. C. Tipple, B.E., Crossley-st.

Hendon.—Road Materials.—For R.D.C. H. W. Rackham, S.

Leeds.—Pipes, etc.—For Sewerage Committee. J. E. Acfield, City E.

London.—Road Materials.—For Shoreditch B.C. R. C. Ray, T.C.

London.—Builders' and Road Materials.—For Hackney B.C. P. Holt, B.E. and S.

Macclesfield.—Highway Materials.—For T.C. E. Hamson, B.S.

Middlesex.—Road Materials.—For C.C. A. Dryland, C.E., Middlesex Guildhall, Westminster, S.W.1.

Middlesex.—Bitumen Emulsions.—For C.C. A. Dryland, C.E., Middlesex Guildhall, Westminster, S.W.1.

Reigate.—Granite, etc.—For T.C. F. T. Clayton, B.S.

Wells.—Limestone, etc.—For R.D.C. O. W. Berry, S.

FEBRUARY 12.

Woodford.—Road Materials.—For U.D.C. A. D. Ward, S.

FEBRUARY 13.

Skegness.—Road Materials.—For U.D.C. R. H. Jenkins, E. and S.

FEBRUARY 14.

Bedfordshire.—Road Materials.—For C.C. C.S., Bedford.

East Grinstead.—Road Materials.—And surface dressing, for U.D.C. E. and S., Council Offices, London-rd., East Grinstead.

Eccles.—Road Materials.—For T.C. B.S.

Felixstowe.—Cement, etc.—For U.D.C. H. Clegg, S.

Frimley and Camberley.—Tar Compounds, etc.—For U.D.C. R. H. Porteous, E. and S.

Long Eaton.—Road Materials.—For U.D.C. H. Raven, S.

Ruislip-Northwood.—Road Materials.—For U.D.C. H. R. Metcalfe, E. and S.

Winchester.—Road Materials.—For T.C. City E.

FEBRUARY 16.

Birkenhead.—Road Materials.—For Corporation. R. W. Johnston, B.E. and S.

Dagenham.—Highway Materials.—For U.D.C. T. P. Francis, E. and S.

Harrogate.—Road Materials.—For T.C. C. E. Rivers, B.E. and S.

Horsham.—Road Materials.—For U.D.C. C. G. Atkinson, S.

Leeds.—Stone Flags.—For Parks Committee. City E.

Marple.—Highway Materials.—For U.D.C. D. J. Driver, S.

Northamptonshire.—Road Materials.—For C.C. E. A. Black, C.S., Northampton.

Oswestry.—Highway Materials.—For T.C. B.S.

Poole.—Road Materials.—For T.C. E. J. Goodacre, B.E.

Southport.—Highway and Builder's Materials.—For C.B. A. E. Jackson, B.E. and S.

Teddington.—Highway Materials.—For U.D.C. E. Bostock, S.

Wortley.—Road Materials.—For R.D.C. F. Thurlby, E. and S.

FEBRUARY 17.

Leeds.—Building Materials.—For Electricity Dept. C. Nelson Hefford, General Manager, 1, Whitehall-rd.

London.—Road Materials.—For Holborn B.C. J. E. Parr, B.E. and S.

London.—Highway Materials.—For Islington B.C. R. H. Jerman, T.C.

Tottenham.—Road Materials.—For U.D.C. E. Townson, clerk.

FEBRUARY 18.

London.—Road Materials.—For Fulham B.C. W. Townend, T.C.

Maldens and Coombe.—Highway Materials.—For U.D.C. J. W. Johnson, clerk.

Swansea.—Highway Materials.—For C.B. B.E. and S.

Twickenham.—Highway Materials.—For T.C. G. R. King, B.E. and S.

FEBRUARY 19.

London.—Road Materials, etc.—For Greenwich B.C. B.E.

Ramsbottom.—Highway Materials.—For U.D.C. A. Plunkett, E. and S.

South Mimms.—Road Materials.—For R.D.C. E. Carr, S., Potters Bar.

FEBRUARY 20.

Hemel Hempsted.—Road Materials.—For T.C. A. Murray-Smith, B.E.

North Riding.—Roadstone.—For C.C. H. G. Thornley, clerk, Northallerton.

Sowerby Bridge.—Highway Materials.—For U.D.C. J. Eastwood, S.

FEBRUARY 21.

Belfast.—Bricks, etc.—For Electricity Dept. City Electrical E., East Bridge-st.

Egham.—Road Materials.—For U.D.C. R. I. Weymouth, E. and S.

Margate.—Highway Materials.—For T.C. E. A. Borg, B.E., 40, Grosvenor-place.

FEBRUARY 23.

Derby.—Highway Materials, etc.—For C.B. E. H. Bennett, B.S.

Ilkeston.—Broken Granite.—For Corporation. B.S.

Nottingham.—Builders' Materials, etc.—For Works and Wages Committee of T.C. T. Wallis Gordon, City E. and S.

Portsmouth.—Highway Materials.—For T.C. R. J. Jenkins, City E.

Rugby.—Tar, etc.—For U.D.C. W. H. Spicer, S.

Southend-on-Sea.—Highway Materials.—For C.B. R. H. Dyer, B.E.

FEBRUARY 24.

Brierfield.—Highway Materials.—For U.D.C. W. D. Haigh, E. and S.

FEBRUARY 25.

Ealing.—Road Materials.—For T.C. W. R. Hicks, B.S.

London.—Road Materials.—For Hammersmith B.C. B.E. and S.

Merton and Morden.—Road Materials.—For U.D.C. C. J. Mountifield, clerk.

FEBRUARY 26.

Hampton.—Highway Materials.—For U.D.C. S. H. Chambers, S.

FEBRUARY 28.

Selby.—Road Materials.—For U.D.C. W. J. Kay, Town Surveyor, 5, New-lane.

NO DATE.

Cumberland.—Tar and Bitumen Compounds.—For C.C. G. O. Lockwood, C.S., The Courts, Carlisle.

ENGINEERING, IRON AND STEEL

FEBRUARY 9.

Billericay, Essex.—Sewerage.—Sewage disposal works at Hutton, etc., for R.D.C. C. E. Lewis, clerk. Dep. £5 5s.

Ellesmere Port and Whitby.—Sewerage.—Sewerage and sewage disposal works, for U.D.C. A. H. S. Waters, E., 25, Temple-row, Birmingham. Dep. £5 5s.

Settle.—Extension.—1,100 lin. yds. of 4-in. spun iron pipes, together with intake works, at Helfield, for R.D.C. Fred. J. Rodwell, E., 37 and 38, Prudential-buildings, Park-row, Leeds. Dep. £2 2s.

FEBRUARY 10.

Isle of Wight.—Water Supply.—Water tower and pumping main, for R.D.C. W. E. Blizard, E., Lansdowne House, Castle-lane, Southampton. Dep. £2 2s.

FEBRUARY 11.

Edinburgh.—Tank.—Water tank at Gowriaw, Roswell Village, for T.C. J. & A. Leslie & Reid, C.E., 29, Waterloo-pl., Edinburgh. Dep. £5.

Grange.—Bath.—Open-air swimming bath together with sea wall, storage tanks, terraces, etc., in reinforced concrete on foreshore at Grange-over-Sands, for U.D.C. S. Dep. £5 5s.

Plymouth.—Piles.—Supply and driving of about 100 8 in. × 8 in. timber piles at Kinterbury Creek, for T.C. J. Wibberley, City E.

FEBRUARY 12.

Chard.—Sewage.—130 yds. of 6-in. and 170 yds. of 9-in. sewers, and sewage purification works, including two sedimentation tanks and two trickling filters, with rotary distributors, in Shepton Beauchamp, near Ilminster, for R.D.C. Arthur J. Martin, E., 108, St. George's-sq., S.W.1. Dep. £3 3s.

Dagenham.—Extensions.—Reinforced concrete sewage tanks, carriers, and incidental works at Council's riverside sewage works, Rainham, for U.D.C. T. P. Francis, E. and S.

Holywell.—Water Supply.—Pumping station and plant with about thirty-five miles of 8-inch, 6-inch, 5-inch, 4-inch and 3-inch mains, together with necessary valves and other fittings, for R.D.C. E. Jones, Clerk. Dep. £5 5s.

Wakefield.—Bridge.—New Wakefield Bridge over River Calder, for T.C. City S. Dep. £3 3s.

FEBRUARY 13.

Leicestershire.—Bridge.—Reinforced concrete bridge under Ibstock-Measham-rd., near Measham, for C.C. J. E. Blackwall, C.S., Grey Friars, Leicester. Dep. £2 2s.

FEBRUARY 14.

Deal.—Repairs.—On Deal Pier, comprising new piles, lattice girders, etc., for T.C. T. C. Golder, B.E. and S.

Shipley.—Culvert.—In ferro-concrete, 91 yds. long, carrying Bradford Beck, for U.D.C. H. Dawson, architect to Council. Dep. £3 3s.

FEBRUARY 16.

Braintree.—Sewers.—3½ miles of 12-in. and 9-in. sewers and construction of pumping station, together with appurtenant works, for U.D.C. Sands and Walker, consulting engineers, Milton-chambers, Nottingham. Dep. £3 3s.

Egypt.—Breakwaters.—Two breakwaters, two slipways and a mooring jetty (new airport of Agami), for Ports and Lighthouses Administration of Egyptian Ministry of Communications. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 10,681.)

***Horsham.**—Water mains.—Contract No. 1. Unemployment Relief Works: laying of approximately 3¼ miles of 14-in. spun iron main and 2¼ miles of 12-in. dia. spun iron main, for the U.D.C. C. G. Atkinson, F.S.I., M.Inst.M. and Cr. E., engineer, Horsham Park, Horsham. Dep. £3 3s.

Whitehaven.—Sewerage.—1,200 yds. of 6-in. and 9-in. stoneware and concrete pipe sewers, together with manholes, junctions, etc., detritus, settling and storm tanks, filters, effluent drains and other works on outfall site, also works in connection with conversion of privies into water closets to 80 houses, at Moresby Parks, for R.D.C. E. Dep. £3 3s.

FEBRUARY 18.

Bristol.—Widening.—Line between Filton Junction and Stapleton-rd., Bristol, total length about 2¾ miles, for G.W.R. Engineer, Paddington Station, W.2. Dep. £3 2s.

Cardiff.—Bridges.—Two reinforced concrete bridges, one being skew bridge over River Taff, consisting of three spans, and other skew bridge over Glamorganshire Canal, consisting of one span, for T.C. City E. Dep. £5 5s.

Whittlesey.—Water Supply.—Supplying and laying of approximately 19 miles of 8-in., 6-in., 5-in., 4-in. and 3-in. cast-iron trunk and distribution water mains, for U.D.C. G. Bertram Kershaw, chartered civil engineer, 9, Victoria-st., Westminster, S.W.1. Dep. £5.

FEBRUARY 20.

Paignton.—Sewerage.—Four miles of main outfall sewer of 4 ft. 6 in. and 5 ft. internal diameter respectively, wholly or chiefly in tunnel, together with various permanent shafts, for U.D.C. F. W. Vanstone & Sons, engineers, 12, Victoria-st. Dep. £5 5s.

FEBRUARY 23.

Maldon.—Sewerage.—Sewerage works for construction of about 2½ miles of 6-in. to 9-in. stoneware pipe sewers, with manholes, etc., also construction of sedimentation, storm-water and humus tanks with percolating filters, and other works incidental thereto, in Tolleshunt Knights, for R.D.C. Lemon & Blizard, engineers, 9, Victoria-st., Westminster. Dep. £3 3s.

Willesden.—Covering.—Culverting in ditch at rear of Drayton-rd., Harlesden, by means of some 406 yds., or thereabouts, of 36-in. diameter concrete tubes, together with appurtenant works, for U.D.C. F. Wilkinson, E. Dep. £1 1s.

FEBRUARY 25.

Egypt.—Building.—Construction of buildings and supply and erection of filters, pumps, electric motors and accessories, piping, etc., for water supply installation for town of Chebin el Kom, for Egyptian Ministry of Interior. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 10,704.)

MARCH 2.

Truro.—Sewerage.—Stoneware, concrete and cast-iron sewers and of manholes in connection therewith; pumping station; screen and detritus chamber; settlement, humus and stormwater tanks; percolating filters, and sludge beds, and execution of other contingent works; also electrically operated centrifugal pumps and motors and two cottages, for T.C. F. A. Barnes, City E. and S. Dep £7.

ROAD, SEWERAGE, AND WATER WORKS.

FEBRUARY 9.

Barking.—Mains.—Main, auxillary and multi-core cables and accessories for connections between new and existing switch houses in connection with extensions to Power Station, for County of London Electric Supply Co., Ltd. Chairman and Managing Director, 46/47, New Broad-st., E.C.2. Dep. £5 5s.

Bexhill.—Making-up.—Footpaths in Cooden-drive (part), for T.C. B.S. Dep. £1 1s.

Billericay.—Sewage Disposal.—Works, comprising detritus tanks, sedimentation tanks, bacteria filters, humus tanks, sludge beds, pump house, office, etc., for R.D.C. Engineers, 33, Great Charles-st., Birmingham. Dep. £5 5s.

Brentford and Chiswick. — Surface Water Sewers.—Construction of, in Grove Park, Chiswick, for the U.D.C. Edward Willis, E. and S., Town Hall, Chiswick, W.4.

Bromley.—Improvements.—To Godwin-rd (part) and Gundulph-rd., for T.C. B.E. Dep. £1.

Leeds.—Water Works Appliances.—And materials and service, for T.C. Harry Shortreed, Waterworks Manager, 36, Great George-st., Leeds.

Swinton and Pendlebury.—Drains.—152 lin. yds. of 24-in. storm-water drains, together with manholes, for U.D.C. H. Entwisle, Council Offices, Swinton, Manchester.

Wolverhampton.—Extension.—7,900 yds. of 4-in. and 4,300 yds. of 3-in. cast-iron pipes, etc., for Corporation. B. L. McMillan, Water Engineer and Manager. Dep. £2.

FEBRUARY 10.

Coseley. — Levelling. — Site levelling works at Summerhill-rd., for U.D.C. E. and S. Dep. £1 1s.

Dartford.—Making-up.—Of Firmin-rd.; Raeburn-av.; Swaisland-rd.; Stanham-rd. (south end); Stanham-rd. (north end); Lawrence Hill-gardens (west end); Lawrence Hill-rd. and part of Lawrence Hill-gardens, for U.D.C. S.

London.—Paving.—Making-up and paving of Ranelagh-gardens, section II., as a new street, for Fulham B.C. A. F. Holden, B.E. and S.

Westmorland.—Roads.—Spraying with tar and bitumen roads, for C.C. C. E. Hines, C.S., 12, Lowther-st., Kendal.

FEBRUARY 11.

Edinburgh.—Sewer.—Construction of Davidson's mains outfall sewer, and works incidental, for T.C. B.E.

Prestwich. — Making-up. — Also drainage of Nursery-rd., from Pine-grove to Bury Old-rd., for U.D.C. H. T. Ainsworth, E. and S. Dep. £1 1s.

Reigate.—Road Tarring.—Tarwashing approximately 520,000 yds. super. of road surface, for T.C. Fred T. Clayton, B.S.

Rochdale.—Paving.—Portion Hesketh-rd. and of Approach-rd. to Hesketh-rd. from Belfield-lane, for C.B. B.S.

Surbiton.—Sewer.—Concrete sewer 27 in. in dia., approximately 1¼ miles in length, along valley of Hogsmill River, together with approximately ¾ mile of 9 in. stoneware sewers and other subsidiary works, for U.D.C. E. and S. Dep. £3 3s.

FEBRUARY 12.

Aldeburgh.—Making-up.—Various streets, for T.C. J. C. Gordon, B.S.

Gosport.—Drainage.—6,000 yds. of storm water sewer, including foreshore outfalls, for certain streets in Lee-on-the-Solent, for T.C. A. Barlow, B.E. Dep. £2 2s.

Harrow-on-the-Hill.—Making-up.—Of Bonnersfield-lane, for U.D.C. J. Percy Bennetts, E. and S. Dep. £1.

FEBRUARY 14.

Fareham.—Mains.—2,430 yds. run of 6-in. and 4-in. cast-iron water mains, for U.D.C. H. T. Privett, Water Engineer. Dep. £1 1s.

Hailsham.—Spraying.—Tar spraying about 100,000 super. yds. with distilled tar of roads, for R.D.C. A. Carr, clerk.

FEBRUARY 16.

Winchcomb.—Water Supply.—3,000 yds. of 4 in. cast-iron water mains through private lands, together with fittings and other incidental works, for R.D.C. E. Dep. £3 3s.

NO DATE.

Cumberland.—Bituminous Compounds.—Surface dressing of part or whole of approximately 500,000 sq. yds. of county roads with refined tar or other approved hot bituminous compounds, for C.C. G. O. Lockwood, C.S., The Courts, Carlisle.

Auction Sales, Tenders, etc.

FEBRUARY 11.

***London, S.W.**—Veryard & Yates will sell, by order of executors, at 110, High-st., Battersea, stock-in-trade of a builders' merchant. Auctioneers, 373, Norwood-rd., S.E.27.

FEBRUARY 17.

***London, N.1.**—Joseph Hibbard & Sons will sell, without reserve, by order of Thornhill Saw Mills & Joinery Co., Ltd., upon the premises, 3a, Richmond-st., Caledonian-rd., Barnsbury, N.1, saw mill plant and machinery. Auctioneers, 15, Newington-green, Islington, London, N.16.

Public Appointments

FEBRUARY 10.

Wolverhampton.—Clerk of Works required by Governors of Wolverhampton and Staffordshire Technical College. Architect, County Education Offices, North-st., Wolverhampton.

FEBRUARY 14.

***Leicester.**—Architectural Assistant required in the Housing Dept. by the City Council. J. S. Fyfe, Housing Architect, 18, Highcross-st., Leicester.

JUNE 4.

London, W.1. — Assistant Examiners. — Forthcoming examinations. Assistant examiners in Patent Office. Secretary, Civil Service Commission, Burlington-gardens, London, W.1.

PROPERTY AS AN INVESTMENT

Messrs. C. H. Leeland and Co., auctioneers, surveyors, valuers, and property consultants, write as follows:—Despite prevailing conditions, there never was, in our opinion, a time when public confidence was so strongly established in the stability of property in general as a tangible asset of practically non-fluctuating value, and, consequently, we feel that the trend of operations therein, is likely to increase in volume, as the unique opportunities for sound investment, capital security and appreciation are realised. At the moment there appears to be a considerably larger supply of super-luxury flats than the somewhat limited demand is capable of absorbing, but, nevertheless (although we do not personally advise investment in this particular type of development scheme), we have every confidence that substantial tenants will be forthcoming in due course, as, after all, there is only a limited supply and unquestionably only one London. We believe, however, that the future success of London building development schemes is to be found in the admixture of shops and residential flats, erected upon sites acquired for development upon terms allowing of both types of accommodation being let at reasonable rentals, such as traders can comfortably afford to pay—and the middle-classes can incur without the necessity of mortgaging the future. The keenest possible demand is experienced, for instance, for middle-class flats with an average of, say, three rooms, kitchen and bathroom, at rentals not exceeding £200 p.a., inclusive, and when it is more generally realised that this type of building scheme is the soundest in essence—because of the almost unlimited demand—it will, we have no doubt, be much easier to acquire suitable sites upon commensurate terms; although, at present, the tendency is to regard every piece of available land as the potential site of a block of super-luxury flats, tenanted by multi-millionaires—but, alas! their numbers are too few.

In conclusion we should like to say that whilst there are still vast possibilities for safe investment in property and its development, there is, in our opinion, no room for the erstwhile speculator, as whilst he is only concerned with quick profit-taking, he does nothing of a productive nature, and, consequently, his activities, more often than not, result in prices being forced up to uneconomic levels, with the result that before progress, as exemplified by development, can take place, someone has to "cut his loss."

Building Trade Wages.

We learn that negotiations were opened in London last week for a new agreement on wages and working conditions in the building trade. Representatives of the National Federation of Building Employers met representatives of the National Federation of Building Trades Operatives acting for some 800,000 men. The meeting was between small negotiating committees on both sides. The following statement was issued at the close of the meeting:—"Representatives of the employers and the unions have discussed the general situation in the building industry, and it was agreed to adjourn until February 11. In the meantime both sides will consider the position in the light of the discussions and suggestions put forward."

ILLUSTRATIONS

(*Continued from page 270.*)

The general contractors for the new work at St. Bartholomew's Hospital, described on page 270, were Messrs. Dove Bros., Ltd., and the following were sub-contractors: Redpath, Brown and Co., Ltd., steelwork; Kleine Flooring Syndicate, floors; R. Crittall and Co., Ltd., heating, etc.; T. Faldo and Co., Ltd., asphalting; J. Starkie Gardner, Ltd., screens in wards; Crittall Manufacturing Co., Ltd., windows; Hope and Sons, Ltd., windows, operation theatres; Mather and Platt, Ltd., water tanks; J. P. White and Sons, Ltd., doors; Shanks and Co., Ltd., special lavatory basins and sanitary fittings; Waygood Otis, Ltd., lifts; Acme Flooring and Paving Co. (1904), Ltd., teak floors; Carron Company, fire escape staircase; Adamsez, Ltd., lavatory basins; Dent and Hellyer, Ltd., sanitary fittings; Slater and Co., sterilisers; Merryweather and Sons, Ltd., fire appliances; Diespeker and Co., Ltd., terrazzo; Bratt, Colbran and Co., surrounds to gas fires; London Sand Blast Works, Ltd., bed number plates; Baird and Tatlock (London), Ltd., laboratory fittings; Sumerling and Co., gas stoves; A. Jones, Lock Co., Ltd., floor springs to swing doors; Janes and Son, dark blinds; Frigidaire, Ltd., refrigerators; Hobbs, Hart and Co., locks; Medical Supply Association, cupboards, etc.; Standard Insulator Co., Ltd., rubber floors; Jas. Gibbons, Ltd., door furniture; L. F. Roslyn, stone carving; A. Hoskins, glass shelves; Stedall and Co., Ltd., ironmongery; Pulsometer Eng. Co., Ltd., vacuum pump; C. A. and A. W. Haward, wire panels to blow throughs; A. C. W. Hobman and Co., tar paving; Coxeter and Son, Ltd., anæsthetic apparatus; Gas Light and Coke Co., gas services.

Messrs. Lanchester and Lodge, FF.R.I.B.A., are the architects.

MIDLAND FEDERATION OF BUILDING TRADES EMPLOYERS.

The annual meeting and luncheon of this Federation were held at the Grand Hotel, Birmingham, on Tuesday, January 20. At the luncheon the retiring President, Mr. S. F. Swift, of Birmingham, proposing the toast of "The City of Birmingham," complimented the city on its wonderful housing achievements since the War, but said that much remained for the builders to do before slums were abolished completely. The Lord Mayor (Alderman W. W. Saunders, J.P.), responding, said it was the desire of everyone that the housing schemes should be pressed forward as quickly as possible.

At the annual meeting of the Federation officers were elected as follows:—President, Mr. P. Bow (Nottingham); senior vice-president, Mr. J. J. Hickin (Wolverhampton); junior vice-president, Mr. E. R. R. Tooby (Stourbridge); treasurer, Mr. Ralph Webb (Birmingham); hon. auditors, Messrs. I. Stimpson (Leicester) and Percy W. Cox (Birmingham).

The Executive Council, in their annual report, stated that the position with regard to direct labour had been very carefully watched by the Federation, and assistance had been given to local Associations in certain instances to combat the menace. At December 31, 1930, the number of Associations directly affiliated to the Federation was 44, the same number as that for the year ended 1929. From returns received from local Associations, it was evident that the membership was being well maintained.

Fulham Power Station.

In a statement the Electricity Commissioners have announced their consent to the extension of the generating station of the Fulham Borough Council in Townmead-road, Fulham, in stages up to an installed capacity of 318,000 kw. in aggregate, the first section, which the council have been authorised to carry out forthwith, having an installed capacity of 132,000 kw. The cost is estimated at £5,250,000.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

Abergele.—U.D.C. proposing town hall and municipal buildings.

Airdrie.—Extension to St. Margaret's Catholic School under consideration by Lanarkshire Authority. Architect, J. Stewart, Education Offices, Albert-st., Motherwell.

Alnwick.—R.D.C. to erect 12 houses at Hauxley, 6 at Craster and 6 at Embleton.

Ashton-under-Lyne.—Rainwater Light Casting Co., Ltd., engineers, Newton, Hyde, acquired portion of Heginbottom's Mill as extension to works.

Ash Vale.—Friend & Lloyd, architects and surveyors, Grosvenor-rd., Aldershot, prepared plans for alterations and improvements to the "Old Ford" public-house at Ash Vale, for H. & G. Simonds, Ltd., brewers, 67, High-st., Oxford.

Ballieston.—Extensions at Ballieston school. Architect, J. Stewart, Education Offices, Albert-st., Motherwell.

Barnsley.—Parochial Council of St. Edward's Church propose parish hall on Park-rd. at £3,000. Architects, N. A. Whitham, 25, Regent-st.

Billingham.—U.D.C. received sanction from M.H. to further 100 houses on Cowpen-lane site.

Birmingham.—E.C. to erect three new Council schools on the Weoley Castle Farm housing estate. Plans by Crouch, Butler & Savage, FF.R.I.B.A., architects, 67a, New-st., Birmingham, for first of these been approved. There will be accommodation for 528 juniors and 432 infants, and cost £29,770. Architects for two other schools are, respectively, H. W. Simister, L.R.I.B.A., Norwich Union-chams., and Herbert T. Buckland, F.R.I.B.A., architect to the committee, Norwich Union-chams.—Two schools are also to be erected, Kettlehouse Farm estate, Perry Barr. Plans prepared by H. T. Buckland in Tring-rd. been approved at £24,550.—Other school in Bandywood-rd. Architect, W. N. Twist, F.R.I.B.A., Sun-bldgs., Bennetts Hill.

Birmingham.—Parochial Council of St. Mary's Church, Handsworth, propose church hall in Church-hill. Plans by R. Dixon, A.R.I.B.A., 1, Albert-st., Dale End. Contract not been let.—James & Lister Lea & Sons ,Cannon-st., Birmingham, preparing plans for schools at St. John's, Gravelly Hill, for Rev. Bertram Gould, Church of Our Lady, Gravelly-hill.

Bishops Stortford.—U.D.C. approved:—3 cottages, Rye-st., F. Markwell.

Blyth.—T.C. secured sanction to borrow £37,000 for 100 houses.

Bolton.—Frank Freeman, L.R.I.B.A., 21, Wood-st., architect for extensions of St. Barnabas' Church. Parochial Council propose extending edifice to Chorley Old-rd.

Bournemouth.—T.C. approved:—shop and 5 houses, Bennett and Malmesbury-park-rds., G. E. Elliott; alterations, "Overcliffe Hotel" and Cliff House, Overcliffe-drive, R. & M. Foulsham; shops, offices and flat, Wilson and Curzon-rds., C. V. Miller; 8 houses, Seafield-rd., J. Jacques.

Bradford.—C. E. Fox, of Holtom & Fox, Union-st., Dewsbury, architect for Catholic Church at Queensbury. Cost £3,700.—C. Simpson & Son, architects, Cunliffe-ter., Cunliffe-rd., Manningham, Bradford, preparing plans for church at Clayton, for the Catholic Authorities.

Brandesburton.—Plans been approved to adapt Brandesburton Hall, East Yorkshire, as home for 181 mental defectives, and for pavilion for men. Cost, £18,000.

Bury.—B.E. appointed consulting engineer to Bury Infirmary by Board.

Carlisle.—E.C. proposing reconstruction Tullie House premises and erection of school of art.

Castleford.—Surveyor to U.D.C. prepared plans for extensions to maternity hospital. Tenders invited.

Cheam.—Sketch plans for junior mixed and infants' school at Cheam Common been approved by B. of E. Cost £16,144.—Three temporary classrooms to be provided at Cheam Common Infants' school, pending proposed junior mixed and infants' school, at £870.

Chesterfield.—Derby E.C. acquired land at Holmewood for Council school. Plans by G. H. Widdows, F.R.I.B.A., County-bldgs., St. Mary's-gate, Derby.

Chislehurst.—Plans passed:—2 pairs, semi-detached houses and garages in Manor-way, Pett's Wood, for Reed & Hoar, Station-rd., Pett's Wood estate.

Chopwell.—Church hall to be built from plans by Hetherington & Wilson, Westgate-rd., Newcastle-on-Tyne.

Chorley.—Catholic Authorities propose central school. A site off Bolton-rd., and the proposed building will have accommodation for 500 pupils. Cost £31,000. Plans by J. O. Harris, 4, Camden-place, Preston.

Christchurch.—R.D.C. to purchase land at Chewton Common; also erect 16 houses.

Dewsbury.—E.C. to proceed with extensions at Technical College at £19,000.—Tenders invited for erection secondary school near Halifax-rd.

Doncaster.—"Blue Bell" hotel, Baxter-gate, proposed to be rebuilt for Joshua Tetley & Sons, Ltd., brewers and bottlers, Hunslet-rd., Leeds. Thomas Johnson & Son, architects, 20, Priory-place, prepared plans.

Doncaster.—T.C. approved:—Works, junction of Leicester-av. and Shaftesbury-av., P. A. Mudd & Co.; 25 houses and 2 shops, Radiance-rd., Corporation; 12 houses, Strathmore-rd., J. L. Hepworth; premises, Trafford-st., John Line & Sons, Ltd.; shed and office, Mutual-st., Doncaster Co-operative Society, Ltd.; "Lonsdale Hotel," Sandringham-rd., Tennant Bros. ,Ltd.; "King George Hotel," Wheatley-lane, Tennant Bros., Ltd.; 3 houses, Bainbridge-rd., Norman & Grant; 8 houses, Masefield-rd., Robinson Bros.

Dudley.—T.C. to apply to M.H. for £20,680 for 52 houses on Priory estate No. 3.—Plan of hotel proposed to be erected on Priory estate by Mitchells & Butlers received.

Durham.—Extensions to science department of University to be carried out at £18,000. W. T. Jones, 7a, North Bailey, Durham, architect.

Eastbourne.—T.C. approved:—H. J. Lavender, A. J. Fellows, architect, H. J. Lavender, builder, 2 pairs of semi-detached houses, Moy-av.; Hydro Hotel Co., F. G. Cooke, architect, alterations forming bathrooms, Hydro Hotel, South Cliff; Paine, Rogers & Co., P. D. Stonham & Son, architects, new warehouse premises, Junction-rd.

Edmonton.—Plans submitted to U.D.C.:—H. Seymour Couchman & Sons, for roads, sewers and layout for 164 houses, east side of Cambridge-rd., and Peachey & Sons, layout of estate and erection of 213 houses with roads, etc., west of Cambridge arterial-rd., adjoining Ladbroke and Alberta-rds.

Egham.—U.D.C. approved:—dressing hut and lavatory, Holloway Sanatorium, Trustees Holloway Sanatorium; alterations and additions to "The Sun" p.h., Bishopsgate, Ashby's Staines Brewery, Ltd.

Eton.—R.D.C. approved:—5 houses, Stomp-rd., W. E. Eyles; 4 houses, Bath-rd., H. E. Bunce.

Filey.—U.D.C. received sanction of M.H. to borrow £500 for extensions to tennis pavilion. Builders are B. Fell & Sons.

Gateshead.—T.C. received approval of B. of E. for open-air school at £14,145. N. P. Patterson, B.E.—Plans approved by T.C. for 20 houses in St. Helens-crescent, Low Fell, by J. Taylor, Low Fell.—Council and Whickham U.D.C. acting jointly in proposed scheme to rebuild bridge over Yeams at £24,000. N. P. Patterson, B.E., preparing plans.

Glasgow.—Council housing scheme, consisting of 115 tenement houses, at Sinclair-drive, Langside. Certain plans approved. Robert Horn, architect, Housing Offices, Glasgow Cross.

Glasgow.—Plans prepared for extension and reconstruction of warehouse at 80, King-st. Architect, A. Wilson, 156, George-st.—Alterations and improvements for Western Infirmary, Church-st., Partick. Architects, Jno. Burnett, Son, & Dick, 239, Saint Vincent-st.—Reconstruction on Cambridge-st. premises for Ross's Dairies, Ltd. Architect, G. A. Findlay, 24, Orleans-av.—Arthur & Co., Ltd., warehousemen, Queen-st., reconstruction and additions on large scale. Architect, J. Miller, F.R.I.B.A., Blytheswood-sq.—Building 8 stories for offices for J. & P. Coats, Ltd., at Saint Vincent-st. Architect, J. Miller, F.R.I.B.A., Blytheswood-sq.—Reconstruction on premises of Glasgow Trades House. Architect, N. McWhannell, 233, West Regent-st.—New clubhouse for Central Branch of the British Legion Club, Ltd. Architects, Lennox & MacMath, 103, Bath-st.—Garage and offices for Alexandria Transport Co., Ltd., in Alexandria-parade. Architect, D. McChleary, 45, Kilbowie-rd., Clydebank.—Plans prepared by Council's own architect for sub-station at Ruchill.—Corporation to carry out improvement and addition scheme on hospital at Balgray-rd. Architect, Thos. Somers, C.E., Office of Public Works, George-sq.—Improvement scheme, to cost £3,000, at Gorbals Cross. Architect, Thos. Somers, C.E., Office of Public Works, George-sq.—Sub-station at Barlock-st. Architects, Corporation staff.

Harrow-on-the-Hill.—Council given permission for church on plot of land at rear of Corbins-lane and abutting on Woodberry-av.

Haslemere.—U.D.C. approved: Four houses, King's-rd., G. W. H. Rhodes.

Heston and Isleworth.—U.D.C. recommended, subject to approval of B. of E., application be made to M.H. for sanction to £3,995 for purchase of land rear of London-rd., Twickenham-rd. and Rose and Crown-lane, for educational purposes.

High Wycombe.—T.C. approved:—4 houses, Totteridge-crescent, E. Maunder; 2 houses, Back-lane, J. Healey.

Huddersfield.—Borough Architect, 26, Ramsden-st., prepared plans for additions to Crosland Moor Institution, for Corporation.

Hursley.—R.D.C. approved: 2 pairs semi-detached houses, North End-av., Chandlers' Ford, D. W. Birch.

Ilford.—T.C. approved:—J. Aldridge, 18 houses and garages, 72/106, Otley-drive; J. Aldridge, 6 houses, 109/119, Otley-drive, and 15 houses and garages, 2/30, Bentley-drive; J. Aldridge, 20 houses, Tanners-lane; J. W. Lobden, 40 houses, 31/71 and 50/86, Charter-av.; G. F. Siegerts, 8 houses, 17/31, Merton-rd.; Lewis Solomon & Son, approach to Regent Cinema, Green-lane; Belfrage, Saville & Hooper, 8 houses, Kingston-rd., and 4 houses, Cavenham-gardens; T. Anders, 4 houses, 1/4, Field-view-gardens, Sunnymede-drive; A. P. Griggs, 8 houses and garages, 22/36, Lincoln-gardens; T. Anders, 11 houses, 209/229, Woodford-av.; Seymour Construction Co., 16 houses, 2/32, Lyndhurst-gardens; T. Anders, 16 houses, 1/16, Westcliffe-gardens, Redbridge-lane; Haines & Warwick, Ltd., alterations, 153/157, Becontree-av.

Kettering.—U.D.C. approved:—A. Mutton, 4 houses, Trafalgar-rd.; Kettering Industrial Co-operative Society, Ltd., flat, Thorngate-st.; Munn & Felton, addition to factory, Meeting-lane; Smith, Edmunds & Co., 4 houses, Kingsley-av.; Kettering Industrial Co-operative Society, Ltd., 2 houses, Blandford-av.

Kingsbury.—Council approved:—4 shops with flats over, Kingsbury-parade; 34 semi-detached houses, Birchen-grove; bungalow, Elmwood-crescent; 16 semi-detached houses, Valley-drive; 3 pairs of semi-detached houses, Tennyson-av.; sports club pavilion, Wood-lane, for Neasden Cricket Club.

Kingston-on-Thames.—B.S. to prepare estimate of erection of new public conveniences in High-st., for both sexes.—T.C. reported that Electricity Commissioners authorised borrowing by Corporation of £2,850 in respect of purchase of freehold of 17, High-st.—Public Library proposing structural extension of lending department.—Plans passed: "King's Arms," Clarence-st., covered way, H. J. Budd & Sons; "Norbiton Hotel," Clifton-rd., alterations and additions, F. J. Fisher & Sons; Water-lane, extension to motor park, Bentalls, Ltd.; 2, Eden-st. and 43, Market-place, alterations and additions, Whinney, Son & Austen Hall; "Black Horse" p.h., London-rd., bathroom and w.c., G. A. Reeve.

Lancashire.—E.C. to make application to M.H. for £3,100 to cover cost of purchase and fencing of site for proposed senior Council school at Turton.—E.C. propose central school for about 320 mixed senior scholars at Askam-in-Furness and a new central school for about 350 senior boys at Dalton-in-Furness. Plans by Stephen Wilkinson, F.R.I.B.A., 16, Ribblesdale-place, Preston.

Lanchester.—Owing to inadequate accommodation in existing school, Durham County E.C. propose erecting school to accommodate 162 children. T. Willey, 34, Old Elvet, Durham, architect.

Leeds.—A. & F. Mosleys, Ltd., architects, prepared plans for rebuilding premises in Camp-rd. for B. Roberts & Co., Ltd.

Lockerbie.—T.C. approved:—alterations, 51, Mains-st., T. Stewart; alterations, 89, High-st., D. Burns.

London (Bermondsey).—L.C.C. recommend borrowing by B.C. of £4,100 for housing purposes at Grange-walk. Also £9,700 for housing in Rotherhithe-st.

London (Chelsea).—Drainage plans passed by B.C.: J. Greenwood, Ltd., house, 18, Pont-st.; French & Co., house, 5, Netherton-grove; J. G. Tilbury, house, 15, Wellington-sq.; Adkins & Turtle, house, 88, King's-rd.

London (Hammersmith).—B.C. recommend: Application to L.C.C. for sanction to borrowing £16,841 in connection with erection of 28 further tenements in area of the Hammersmith (Southern) Improvement scheme.—Plans passed: Borough Council, electricity sub-station, Beavor-lane; L.C.C., playshed and extension of lavatory accommodation, Erconwald-st. and Mellitns-st. schools; Borough Council, town hall, Brook Green.

London (Kensington).—B.C. recommend: Financial provision in respect of Kensington High-st. improvement at £150,000; and £6,500 to defray cost of land in Gregory-pl. acquired by Council for Town Hall extension purposes.—Council recommend £43,500 for acquiring, demolishing and rebuilding areas under the Housing Act, 1930.

London (Wandsworth).—B.C. received M.H. consent to appropriation of portion of dust destructor site, Fountain-rd., Tooting, and site in Garratt-lane, Tooting, adjoining Streatham Cemetery, for purposes of housing.—Council received plans for C. Miskin & Sons, for erection of blocks of flats on site at junction of Atkins-rd. and New Park-rd., Clapham South.

London (Westminster).—City Council approved:—R. G. Broad, additions to garages, 2, Lyall-mews; A. Lakeman, addition, 130, Wilton-rd., abutting on Hudson's-place.

Maidenhead.—Estimated cost of new Council school at North Town is £22,976.—Plans prepared for enlargement of laundry at isolation hospital. Cost £200.

Manchester.—United Yeast Co., Ltd., 80, Miller-st., propose additions to premises adjacent site having frontages to Miller-st., Beswick-row and Oswald-st., off Corporation-st. Plans by George Bradbury & Sons, architects, 14, Cook-st., Liverpool. Contracts not been placed.—Halliday & Agate, F. & A.R.I.B.A., 14, John Dalton-st., architects for 10 houses on George-st. and Selby-st., Moston.—Plans approved for sterilising room and lock-up garages, Upton-st., Chorlton-on-Medlock, for Pieroni & Co., architect, A. McDonald.—Alterations to mill, Bengal-st., Ancoats, for Fine Cotton Spinners and Doublers Association, Ltd.—Walker & Homfray, Ltd., Woodside Brewery, Eccles New-rd., Salford, proposing alterations and additions to "Turk's Head" hotel, Shudehill. Plans by Col. George Westcott, F.M.S.A., Game Cock-chams., 13, Bridge-st., Manchester. Contracts not yet placed.

Manchester.—Watch Committee decided to abandon scheme of car park on cleared site of old fire station in Jackson's-row and proceed with new police headquarters. Plans approved by Home Office.

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* See also List of Contracts, Competitions, etc.

Melton Mowbray.—F. J. Bartlett, A.R.I.B.A., Boots Pure Drug Co., Ltd., Nottingham, prepared plans for reconstruction of premises in South-parade.

Meriden.—R.D.C. approved:—5 houses, Hall-walk, Coleshill, F. A. Jacques; 8 houses, Brown's-lane, Allesley, Gauey Bros.; 3 houses, Radford-lane, Westhill estate, Coundon, J. F. Daly & Son; parish hall, New-rd., Water Orton, Parochial Church Council; village hall, Highfield-lane, Corley, W. White; factory and office, New-rd., Woodlands Farm estate, Minworth, Kerson Manufacturing Co., Ltd.; 44 houses, Highfield-rd., Castle Bromwich, A. Francis.

Motherwell.—Plans prepared for reconstruction and additions, County Hospital. Architect, P. J. Smith, Lanarkshire Offices, Hamilton.

Newcastle.—E. W. F. Liddle, Eldon-sq., Newcastle-on-Tyne, architect for warehouse for Higginbottom.

Newcastle.—Health Committee recommended City Council to proceed with wings to present nurses' home at £18,000. Plans by City Architect.

Newcastle-on-Tyne.—Extensions are proposed to the premises of Jayson, Westgate-rd., Newcastle, to plans by M. K. Glass, 20, Saville-row, Newcastle.

Norbury.—Croydon Public Health Committee report that M.H. sanctioned borrowing of £2,700 by Corporation for building public conveniences at Norbury; also that he is prepared to sanction loan for extension of convenience at Thornton Heath.

Northampton.—Northants County Cricket Club approved plans for extension pavilion on County Cricket Ground.

Northumberland.—C.C. have scheme in hand for speeding up traffic between Newcastle and Morpeth. It is proposed to replace old Stannington bridge with a new steel structure. Bridge will be built over River Blyth.—E.C. approved plans for school at Shiremoor, at £15,000, to accommodate 500 pupils; conversion of existing school buildings at Murton, Earsdon, into senior school for 480 pupils, £10,250; senior school at Haltwistle, to accommodate 480 pupils, £22,600. W. W. Tasker, F.R.I.B.A., Red House, Fawdon, Gosforth, Newcastle, architect to E.C.

Northwood.—Plans passed: 13 garages and workshop, High-st., Ruislip, by E. Batten; semi-detached houses (type 1), Ruislip Manor Gardens estate, Ruislip, H. L. Bowers; detached houses, Ruislip Manor Gardens estate, Ruislip, H. L. Bowers; semi-detached houses, Ruislip Manor Gardens estate, Ruislip, H. L. Bowers; detached houses, Ruislip Manor Gardens estate, Ruislip, H. L. Bowers.

Notts.—Sites and Buildings Sub-Committee of E.C. reported that in connection with Manton district arrangements been made with Greenwoods (Mansfield), Ltd., to erect forthwith additional wooden building to provide accommodation for further 96 scholars. Cost £440.—Tenders approved for additions to Council school at Edwinstowe and additions and alterations to North Clifton Council school.—Stapleford (Hicking's-lane), erection of school for 388 junior mixed and infant scholars, Hofton & Sons, Beeston, £8,050; Edwinstowe, extensions to existing Council school, Greenwoods (Mansfield), Ltd., Mansfield, £5,326; North Clifton, alterations and extensions to existing Council school, C. F. Rowsell, Laneham, £1,147 5s. 9d.—Final plans for permanent school for 520 scholars on Walker-st. site, Eastwood, been approved. It recommended that plans be forwarded to B. of E. for approval. Cost £20,000.

Penrith.—R.D.C. propose £76,000 water supply scheme.

Plymouth.—Extensions and additions to laundry premises, Millbay-rd. and Battery-st., of Millbay Laundry, Cleaning and Dyeing Co., Ltd.

Pool-in-Wharfedale.—Plans prepared and tenders invited for extensions to paper mills for Whiteleys, Ltd. Architects, Nicholl & Nunn, Market-st., Bradford.

Preston.—Wesleyan Authorities acquired site at Broughton, near Preston, for church. Architect not yet appointed.

Redcar.—T.C. secured sanction from H.M. to erect 150 houses at Dormanstown.

Rochdale.—B. of E. approved scheme for alterations to St. Alban's School, Rochdale, for Managers. Architect, F. Thorpe, F.R.I.B.A., Union Bankchams., Church-lane, Oldham.

Rotherham.—R.D.C. propose 8 houses at Whiston.—J. C. Lister, of Wickersley, proposes 70 houses at Wickersley.—Dalton Main Collieries, Ltd., considering erection of pit-head baths at their Silverwood Colliery.

St. Helens (Lancs).—Rev. Ralph Holden, Church of St. Teresa, Garton-lane, Sutton Manor, proposes church. Plans by W. Howe.

Seaham Harbour.—U.D.C. adopted recommendation for public convenience and shelter on sea front at £800.

Sheffield.—City Architect preparing plans for tram shelter at tram terminus in Pinstone-st.—Wesleyan Authorities propose church on Norwood estate. Architect has not yet been appointed.

Slough.—U.D.C. approved:—W. Varney, 26 houses, off Windsor-lane, Cippenham; H. Heath, 3 garages, off Leeds-rd.; Messrs. Chennells Bros., house, Cippenham-lane, 4 houses, Croft Hill-rd.; President and Committee of the Actors' Orphanage, sports pavilion, Langley-rd.

South Shields.—Housing Committee recommend T.C. to purchase Tyne Dock Land Co.'s land abutting Dean-rd. and Prince Edward-rd. It is also proposed to seek approval of Ministry for 48 houses, at £18,823, at Cleadon. In Thames-st. clearance scheme about 450 houses are necessary. J. P. Watson, B.E., preparing plans.

South Shields.—Question of site for a mosque been definitely settled. Plans prepared by H. Hill.—It is proposed to readapt St. Bede's R.C. schools, and also build new infants' school for 400 children and a junior department above for 400 children. Another scheme provides for school at Harton for 500, for which T. A. Page & Son, King-st., are architects.

Stockton.—M.H. held inquiry into application of Corporation to borrow for sewerage scheme for district of Hartburn £18,067.

Sunderland.—Corporation propose acquiring land near Ford housing estate for housing.

Sunderland.—Corporation received sanction from M.H. to borrow £198, difference between two tenders received for Council houses.

Sunderland.—R.D.C. propose 150 houses. F. Davison, S.

Surrey.—C.C. proposing improvements to various bridges.

Tenbury.—V. Rowe, County Architect, 36, Foregate-st., Worcester, preparing plans for school in Bromyard-rd.

Twickenham.—Humphreys, Ltd., submitted sketch plans for stands, etc., on Rugby Football Union ground.

Twickenham.—T.C. received M.H. sanction to borrowing of £33,850 for new outfall sewer from Station-rd. to works.

Tynemouth.—T.C. received M.H. sanction to borrowing £34,523 for houses, and £4,772 for roads in connection with Council's proposed scheme for 104 houses at Balkwell.

Wakefield.—Extensions to mills, Denby Dale-rd., for Patons' & Baldwins, Ltd. Plans by Newbald & Hartley, 4, Crown-court.

Wakefield.—J. P. Firth, architect, King-st., prepared plans for reconstruction of "Waterloo Inn," Westgate-end, and "Shakespeare Inn," Teall-st., for Leeds and Wakefield Breweries, Ltd.

Walton.—U.D.C. approved: Mrs. L. A. Willson, two additional blocks of four houses each, Garden-rd., Walton-grove estate; S.C.C., addition to schools, Ashley-rd., Walton.

Weardale.—R.D.C. approved proposal to build 10 houses at Frosterley.

Wellington.—Ashford & Jordan, AA.R.I.B.A., architects, 146, Corporation-st., Birmingham, preparing plans for chapel at Wrekin College, Wellington.

West Ham.—Finance Committee reported that certain items of expenditure not included in rate estimate: £50,000 for unemployment relief, paving works; £60,000 for three villas for 120 patients, and temporary administrative accommodation at Ockendon Mental Deficiency Institution; £20,000 for acquisition of land at High-st., Stratford.

West Riding.—E.C. propose elementary school at Otley for about 200 children and a new central mixed school on Cowpasture, Ilkley. Plans by County Architect, H. Wormald, A.R.I.B.A., County Hall, Wakefield.

Wharfedale.—R.D.C. approved:—semi-detached houses, Fairway, Tranmere estate, H. H. Tomlinson.

Whitworth (Lancs).—U.D.C. to erect public conveniences at Healey.

Williton.—R.D.C. to build 48 more houses.

Winchester.—R.D.C. passed:—7 detached houses, Stanmore-lane, Compton, L. A. Curtis.

Walthamstow.—U.D.C. approved:—13 houses, Wadham-rd., A. C. Firmin; 3 houses, Coleridge-rd., A. C. Firmin; 66 houses, Charter-av., Forest View-rd. and Queenswood-av., South Essex Property Co.; 5 houses, Woodend-rd., J. Moon; 2 store sheds, Wood-st., London Co-operative Society; alterations, 277, Hoe-st., London Co-operative Society; alterations, "Lorne Arms," Queen's-rd., R. J. L. Slater; 11 houses, Wickham-rd., H. Hawthorn; 30 houses, Carmanton-rd., Highfield Estates, Ltd.

York.—Tenders invited for church and presbytery of English Martyrs at Dalton-ter., Blossom-st., for Rev. G. Richardson. Architects, William & Jopling, Hull.

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NEW CINEMAS

Barton-on-Humber.—We learn that Mr. W. H. Buttrick, L.R.I.B.A., Bank-chambers, Scunthorpe, Lincs., has prepared preliminary plans for a cinema at Barton-on-Humber for the East of England Cinemas, Ltd., 31, Bigby-street, Brigg, Lincs.

Blackburn.—A new cinema is proposed to be erected on a site in Penny-street, Blackburn. Messrs. Butterworth & Duncan, architects, of 2a, Baillie-street, Rochdale, have prepared the plans.

King's-road.—Mr. Clifford Aish, F.S.I., 22, Bedford-street, W.C.2, is architect for a cinema proposed to be erected upon a site on the southern side of King's-road, abutting upon Upper Manor-street and Bedford-terrace. The Chelsea Borough Council offers no objection.

London.—We stated in our last issue that Mr. Louis Morris, of 23, Bloomsbury-square, W.C.1, was proposing to erect a number of cinemas in and around London, including one at St. Albans. We much regret that our information was incorrect, and that this Mr. Morris is not concerned with the scheme. Mr. L. Morris, 91, Shaftesbury-avenue, W.C.2, proposes, we understand, a cinema at St. Albans, to plans by Mr. J. Martin Hatfield.

Newcastle-on-Tyne.—A scheme is afoot to erect another new cinema in the Fenham district, Newcastle-on-Tyne. Messrs. Watson & Scott, Newcastle-on-Tyne, have prepared preliminary plans.

Preston.—For the erection of a new cinema on Liverpool-road, Penwortham, for Messrs. Falla (plans by Mr. Barker Crabtree, architect, Clifton-chambers, 20, Fishergate-hill, Preston) a contract has gone to Messrs. J. Spencer & Son, of Preston.

Sheffield.—The directors of the Central Picture Houses (Sheffield), Ltd., The Moor, Sheffield, have acquired adjoining premises to provide additional accommodation. Plans are by Messrs. Chapman and Jenkins, L. & A.R.I.B.A., 18, Norfolk-row, Sheffield.

Stranraer.—A new cinema is to be built here. Plans are under preparation by the architects, Messrs. Jno. McKissack and Sons, 68, West Regent-street, Glasgow.

Wandsworth.—In connection with the cinema to be erected for Associated British Cinemas, Ltd., in York-road, the steel contract has been awarded to Messrs. Redpath, Brown & Co., Ltd., of 3, Laurence Pountney-hill, E.C.4, and the mason, brick and joinery contracts to Messrs. Hunter & Clark, of 9, Duckold-road, Wandsworth. Messrs. Robert Davidson, of 85, New Oxford-street, W.1, will carry out the plumbing work, and Messrs. G. N. Haden & Sons, Ltd., of 60, Kingsway, W.C.2, the heating. Plans were prepared by the A.B.C. Staff Architect, Mr. W. R. Glen, F.I.A.S., 149, Regent-street, W.1.

Yeovil.—It is understood that Mr. J. A. Lucas, F.R.I.B.A., Guildhall-chambers, High-street, Exeter, has prepared plans for a cinema in Church-street, Yeovil.

The "Kine" Year Book.

The "Kinematograph" Year Book, now in its eighteenth year, continues its sphere of usefulness with the new edition. A host of information of considerable use to the renter and exhibitor is contained, and the various branches of the trade—artistes, directors, musicians and technicians—have sections of special interest. A digest of the various Cinematograph Acts and a summing up of legislation during 1930, by Mr. Norman Hart, will be found useful in view of the state of disturbance occasioned by Sunday opening. Another useful section is the Kinema Directory, which details every house in the British Isles. Of primary interest to the architect is an "Equipment and Technical" section, in which such subjects as "Theatre Construction," "Lighting," "Lounge Equipment," etc., find a place. Price 10s., the book is obtainable from Kinematograph Publications, Ltd., 93, Long Acre, W.C.2.

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Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

		s.	d.
Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

		s.	d.
Extra only to the price of ordinary brickwork :—			
Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	" "	9	6
Three-quarter-inch on flats in two thicknesses	" "	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Beer stone and all labour fixed	" "	15	0
Portland stone fixed	" "	20	0
Chilmark stone fixed complete	" "	17	6

SLATER.

		s.	d.
Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	96	0

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	0	11
Centre for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.	—	44/6	53/-	60/6
Do. tongued and grooved	"	—	49/-	57/6	65/-
Do. matchings	"	45/-	51/-	—	—
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size	" "	3	9

DOORS.

		1¼"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	6

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail average, 3 in. × 3 in.	" "	6	0
Add if ramped	" "	12	0
Add if wreathed	" "	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring Linges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roofwork	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	42	0
Do. Do. in flats	"	41	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	3
Copper nailing	" "	0	3

		½"	¾"	1"	1¼"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	" "	2	9
Do. Do. Keen's	" "	4	0
Add saw lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, etc. for suspended ceilings.)			
Portland cement screed	" "	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛-in. rolled plate	" "	0	9
¼-in. rough rolled or cast plate	" "	0	10½
¼-in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

*These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

Coloured Asphalt.

It is well known that natural rock asphalt is a splendid material for building constructional work, but up till the present time the use to which it has been put for flooring purposes has been restricted to commercial and engineering premises, where colour is of no importance. With the introduction of Colourphalt, an asphaltic compound manufactured and laid by the Limmer and Trinidad Lake Asphalt Co., the uses of asphalt for flooring purposes can be largely extended. Colourphalt is made in six different permanent colours, viz., red, brown, grey, stone, green and bright green, and is very suitable for the floors of balconies, schools, billiard-rooms, bathrooms, hospital wards, banks, etc. We learn it is dustless, impervious and hard wearing, and that the finished surface presents a smooth and polished appearance.

An Ironwork Contract.

Messrs. W. A. Baker and Company (1910), Ltd., Westgate Ironworks, Newport (Mon.), have secured the contract for the pens, boundary fencing and gates and also wrought-iron entrance gates for the New Cattle Market, Grimsby, under Mr. H. Gilbert Whyatt, engineer to the County Borough of Grimsby.

New Refrigeration Showrooms.

Frigidaire, Ltd., have taken No. 141, New Bond-street, for their new London showrooms. No. 141 has been completely reconstructed for Frigidaire, Ltd. Black marble and polished steel are used for the street front. A discreet electric sign displays the word "Frigidaire." Inside, plastic paint has been used for decorating. Even as late as twenty years ago, people did not dream of home refrigeration as it is to-day. It was regarded more as a toy than as a commercial proposition. But from 16 years ago the Frigidaire business grew until to-day, we learn, there are 1,500,000 Frigidaires in use.

Spray Painting.

The steadily-increasing demand for spray-painting and finishing equipment both at home and abroad has made it necessary for the Aerograph Co., Ltd., of 43, Holborn Viaduct, London, E.C.1, to build a large new factory at Lower Sydenham, S.E.26. The factory is being equipped with the latest types of high-precision machinery for the manufacture of spray guns, air compressors, spray booths and all the other many and varied items of equipment which constitute modern spray-painting and finishing plant. The head offices will remain at 43, Holborn Viaduct, E.C.1.

A Staff Whist Drive.

Members and friends of the football section of the Standard United A.C. (The Standard Steel Co. (1929), Ltd., and the Croydon Foundry, Ltd.), spent a most enjoyable evening at a whist drive held at St. Jude's Hall, Thornton Heath, on Saturday last. The hall was full, every table being occupied, and the prizes, which numbered 15, were keenly contested for. Mrs. H. Needham, wife of the managing director of the Standard Steel Co. (1929), Ltd., kindly presented the prizes, amid great enthusiasm.

A New Hoist.

The British Steel Piling Company, Ltd., has brought out a new builders' hoist, described in a leaflet. This "Epic" hoist is made in four sizes—5, 10, 15, 20 cwt. load capacity, and can be supplied with flat bed, or mounted on either rail or road wheels, as desired. The hoist is simple to operate. One lever controls all operations. There is no foot brake, and the gear drive is on the epicyclic principle. The gears are enclosed totally and run in an oil bath. The hoist is adaptable, we learn, and is useful for operating a platform hoist or a pile-driving monkey. The leaflet is obtainable from 54a, Parliament-street, S.W.1.

A New Valve.

The introduction of a new valve with a one-piece screw-over bonnet and slip-on stay-on disc-holder is announced by Messrs. Jenkins Bros.,Ltd., of 6, Gt. Queen-street, Kingsway, W.C.2. The bonnet in combination with the disc-holder is a new departure in bronze valve design. The one-piece bonnet construction provides ease in removal and contributes unusual strength, which, it is claimed by the manufacturers, prevents springing or distortion, even though the bonnet is removed and replaced repeatedly. The valve throughout is heavily proportioned. A copy of a circular, giving full details about the new valve, may be obtained by writing to the manufacturers at the above address.

Electric Warming.

The marked reductions which have been made by various electricity supply authorities in the price of current, following the setting up of the national grid, has been responsible for an extended use being made of current for uses other than lighting. A device, the "Roestat," has been put on the market by Messrs. Griersons, Ltd., of 4, Bloomsbury-place, W.C.1, which makes it possible, so we are informed, to maintain a room or rooms constantly warm throughout the winter without trouble and at a low cost. Full particulars are obtainable upon request from the firm.

Patents.

The year 1931 will complete 45 years' active practice by Benj. T. King (commencing in 1886 as an articled pupil) in a professional career devoted exclusively to the patenting of inventions and registration of trade marks and designs throughout the world. Twenty-two years ago the business of King's Patent Agency was incorporated as a private limited company. Consolidation of personal reputation, good will, and continuity of tenure and service has been thereby created and ensured, and will survive, Mr. King's two sons being directors of the business.

A Company Conversion.

The Atlas Stone Co., Ltd., originally established in Cambridge in 1900, but now with factories at Cambridge, Meldreth, Cambs, North Woolwich and Greenhithe, Kent, has been converted from a private company into a public company with a capital of £150,000 in £1 ordinary shares, and of which capital £125,000 is issued, and has been fully subscribed, and there will thus be no public issue. The company has a long reputation of manufacturers of "Foothold" paving slabs, kerbs and channels and are manufacturers of cement-asbestos goods in the shape of flat and corrugated sheets, tiles, etc.

Automobile Compressor.

A leaflet of great use to gas, water and electricity undertakings and contractors, builders and others has been issued by Messrs. Lacy-Hulbert and Co., Ltd. It deals with the "Boreas" automobile compressor. This plant is portable, and can operate road breakers, picks, tampers, riveters, chippers, caulkers, spray painters, etc., etc. It will travel at 30 m.p.h. and will deliver 60 cu. ft. of free air per minute at 100 lb. pressure, and embodies all necessary parts and fittings with provision for carrying the usual tools, hose, spares, etc., and room for one or two operators besides the driver. Full details of this plant are obtainable from Boreas Works, Beddington, Croydon.

A Dividend.

Messrs. Ewart & Son, Ltd., announce a final dividend of 20 per cent. for the half-year on the Ordinary shares, which, with the interim dividend already paid, makes 36 per cent. for the year. Dividends will be posted on March 2.

Ideal Home Exhibition.

The *Daily Mail* Ideal Home Exhibition will be held at Olympia from April 7 to May 2. It is understood that the housing section will occupy the National Hall and has again been given special attention. Particulars are obtainable from Carmelite House, E.C.4.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.
¶ Denotes *accepted by H.M. Office of Works and H.M. War Office*.

Amble.—Conveniences, for the Council:—

*R. Carse & Son	£415

Ampthill.—Wiring the administration block, various wards, porter's bungalow, and laundry at Isolation Hospital, Steppingley, for the R.D.C. Mr. L. Foster, surveyor:—

Kilby & Young, Luton	£314 7 0
R. & J. Stearn & Co., Luton	296 0 0
Read & Partners, Ltd., London	273 0 0
Westnutt & Co., Dunstable	239 8 6
F. E. Williamson, Bletchley	230 5 0
Griffin Bros., Leighton Buzzard	215 10 0
Christy Bros. & Co., St. Neots	210 11 4
Beds. Elect. Inst. Co., Bedford	210 0 0
*Clem Brown, Luton	198 10 0
W. F. Hunt, Shefford	196 0 0

Ashton-under-Lyne.—School for senior boys in Mossley-road, for the E.C. Mr. G. W. Handforth, Director of Education, 8, Warrington-street, Mr. Percy Howard, A.R.I.B.A., architect, 88, Mosley-street, Manchester:—

*Thomas Warrington, Hyde.	

Barrow-in-Furness.—Boundary wall at the Blake-street playing field, for the Corporation. Mr. W. C. Persey, Borough Surveyor:—

*J. Strickland, Barrow-in-Furness	£1,170

Beaumaris.—Presbytery in Rating Row, for the Rev. A. E. Goatman, Church of Our Lady Queen of Martyrs:—

*Hallwoods, Ltd., Hyde.	

Beckenham.—Erection on a cleared site adjoining High-street and Church-avenue, Beckenham, of new municipal offices, for the U.D.C.:—

*J. Elliman & Son, Ltd., 102, Bromley-road, Beckenham (Subject to approval.)	£83,636

Belper.—Bank at 60, King-street, for the National Provincial Bank, Ltd., London, E.C.3. Messrs. Naylor, Sale & Woore, F. & A.R.I.B.A., architects, St. Mary's-chambers, St. Mary's-gate, Derby:—

*J. W. Haynes, Belper.	

Birmingham.—Handicraft room and science laboratory at Handsworth New-road junior boys' school, and two domestic science rooms at the senior girls' school, for the E.C.:—

*J. E. Williams, Aston, Birmingham	£5,914

Birmingham.—Buildings on school playing fields, for the E.C.: (1) Pavilion, with boys' and girls' changing rooms, two class spaces and staff rooms at Handsworth-wood; (2) pavilion, with boys' and girls' changing rooms, stables and groundsmen's quarters, at Yardley-wood; and (3) alterations and extensions to existing pavilion at Elmdon-road:—

(1)—*Cowiesons, Ltd.	£895 0
(2)—*Cowiesons, Ltd.	1,053 10
(3)—*Wm. Lygo, Birmingham	738 18

Birmingham.—Two additional classrooms, etc., at Fentham-road senior girls' Council school, for the E.C.:—

*Maddocks & Walford, Erdington, Birmingham	£6,331

Birmingham.—Caretakers' houses at (1) Woodhouse-road Council school, Harborne; (2) at Cranbourne-road school, Perry Barr, for the E.C.:—

(1)—*B. Whitehouse & Sons, Birmingham	£665
(2)—*Trown & Sons, Birmingham	760

Birmingham.—Reconstruction of Severn-street Council school, for the E.C.: (1) building work; (2) heating apparatus; (3) installation of electric light:—

(1)—*Maddocks & Walford, Erdington, Birmingham	£32,499 0
(2)—*The Brightside Foundry & Engineering Co., Ltd., Birmingham	1,701 0
(3)—*T. Glover, Birmingham	1,096 11

Birmingham.—Additional handicraft room, improvement of lavatory accommodation at Steward-street senior boys' school; and additional staff room at the junior mixed school, for the E.C.:—

*L. Gorton, Birmingham	£3,818

Birmingham.—Three additional classrooms, etc., at Fox-street senior girls' school; new classroom, etc., at the junior school; and new room for head teacher at the infants' school, for the E.C.:—

*S. F. Swift & Sons, Ltd., Birmingham	£8,585

Birmingham.—Public-house premises on a site between Norfield & Rubery on Bristol-road South, for Messrs. Mitchells & Butlers, Ltd., brewers:—

*J. & A. Brazier, Ltd., Bromsgrove, Birmingham.	

Birmingham.—Branch banking premises at Pershore-road, for the Birmingham Municipal Bank. Mr. Walter Norman Twist, architect, Queen's College, Paradise-street:—

*T. Elvins, Soho-road, Handsworth, Birmingham.	

Birmingham.—Premises in Pershore-road, near Balsall Heath-road, Balsall Heath:—
Main contractors—*Maddocks & Walford, Tyburn-road, Birmingham.
Steelwork—*Wilfrid Robbins, Great-bridge, West Bromwich.

Blackpool.—Extensions to premises, Selbourne-road and Coleridge-road, for Messrs. Waller and Hartley (1927), Ltd., Durham-road. Mr. James Burns, L.R.I.B.A., architect, 3, Birley-street, Blackpool:—
General contract—*Keenan and Mates, Ltd., St. Annes-on-Sea.
Steelwork—*J. Booth & Sons, Bolton.
Floors—*Caxton Floors, Ltd., Manchester.
Metal casements—*Williams & Williams, Ltd., Chester.

Bolton.—Extensions to the premises of Messrs. Moss & Smith, Ltd., hardware merchants, Kensington House, Marsden-street:—
*George & Beddows, Valletts-lane, Bolton.

Bradford.—770 houses on the Chellow Grange estate, Haworth-road, for the Corporation. Mr. W. Williamson, City Architect:—
*Henry Boot & Sons, Ltd., Sheffield £222,202

Brighton.—Shop premises on the site at the corner of Grand-parade and Edward-street:—
*James Bodle, Ltd., Eastbourne £3 839

Bristol.—Installation of electric lighting of 18 houses in Richmond-villas and 21 houses in Richmond-terrace, Avonmouth, for the Port Authority. Mr. T. A. Peace, Chief Engineer, Avonmouth Dock:—
*F. C. Goss, 128, Cranbrook-road, Bristol.

Bromsgrove.—Reconstruction of a new Court Theatre. Mr. C. H. Gadd, A.R.I.B.A., architect, Town Hall-chambers, Bromsgrove:—
General contract—*J. & A. Brazier, Ltd., Bromsgrove.
Heating—*Wm. Hedges, Bromsgrove.
Plastering and decorations—*Bryan's Adamanta, Ltd., Birmingham.
Flooring of crush hall—*J. J. Ebner, London.

Bury.—Reinforced concrete retaining wall and appurtenant works in Bolton-street, for the C.B. Borough Engineer:—
*R. T. Byrom, Collinge-street, Bury.

Bury.—Alterations to 16, Silver-street, for Mr. S. Taylor, printer:—
*W. Rose & Sons, Ltd., Oldham.

Bury.—Printing works in Dumer's-lane, for Messrs. Bibby & Baron, Ltd., New Bridge Mills. Messrs. Byrom & Noble, A.A.R.I.B.A., architects, 9, Victoria-buildings:—
*John Tinline, Ltd., Bury.

Bury.—Extension to works, Bridge Hall-lane, Heap Bridge, for Messrs. Crosland & Pickstone, Ltd., dyers, etc.:—
*John Tinline, Ltd., Bury.

Cardiff.—New wing additions to Heathfield Home, for the Sisters' of Providence of the Institute of Charity. Mr. William Ellis, F.M.S.A., architect, 49, Deansgate, Manchester:—
*P. J. Thomas & Sons, Ltd., Cardiff £40,000

Chelmsford.—Alterations at Messrs. Bond's, with large arcade bronze metal shop fronts. Messrs. W. H. Pertwee & Howard, architects:—
*Stanley Jones & Co., Ltd., London, W.12.

Cheshire.—Widening Wheelock Brock-bridge over main Sandbach-Crewe-road for the C.C.:—
*W. Mulcaster, Haslington, Crewe.

Chiswick.—Alterations and additions to the County School for Boys, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect, 10, St. George Street, S.W.1:—

Ferris Brothers, Acton	£2,547
Fassnidge & Son, Ltd., Uxbridge	2,487
G. Godson & Sons, Kilburn	2,398
G. Challis & Co., Ltd., Brentford	2,347
G. Bollom & Sons, Ltd., Acton	2,327
R. Hewett, Ltd., Acton	2,325
J. Dorey & Co., Ltd., Brentford	2,312
‡W. Lacey, Hounslow	2,276

Cowpen.—Rebuilding of the Cowpen Coronation Club, King-street, Blyth:—
*George Towers, Blyth.

Cramlington.—Fences at Newtown, for the U.D.C. Quantities by the surveyor:—
*H. Duckworth & Son, Station-road, Cramlington ... (per lineal yard) 3s. 3d.

Croydon.—Conveniences, at (a) Thornton Heath recreation ground, to replace the existing accommodation, and at (b) Addington Hills, for the C.B.:—
*Edwin Smith, Croydon ... (a) £330 (b) £634

Croydon.—Two classrooms, cloakroom, and w.c.s at Thornton Heath Polytechnic, for the C.B.:—

*W. J. Cearns, Carpenters-road, Stratford (buildings)	£520
*C. H. Gibson, Ltd., Croydon (foundations and drains)	182
*Wenham & Fowler, Croydon (heating)	56

Doncaster.—Fish stalls under new market roof, for the C.B. Mr. R. E. Ford, Estates Surveyor, 3, Priory-place:—

‡Whittingtons (Doncaster), Ltd., Don-street, Doncaster	£1,612 17

Dudley.—52 houses on a site near Nith-place, Priory estate No. 3, for the T.C.:—

‡McKeand, Smith & Co.	£19,332

Dundee.—Mason work and iron railings, etc., required in connection with proposed road widening at 1, Springfield and 23 and 25, Perth-road, for the T.C. Quantity Surveyor, 91, Commercial-street:—

*Tullock & Strachan, 62, Bell-street	£395 15 1

East Barnet.—Fencing of the island site at the junction of the Great North-road and Station-road, for the U.D.C. Surveyor:—
*Parker, Winder, Achurch, Ltd.

Easthampstead.—22 non-parlour type houses at Binfield-road, Bracknell, for the R.D.C.:—
*Francis Bros., Armour-road, Tilehurst.

Eastry.—Four additional houses at Wingham, for the R.D.C.:—
*Thompson & Son ..... (per pair) £804

Ellesmere.—Extensions to St. Oswald's school, for Managers. Messrs. Shayler & Drake, F.R.I.B.A., architects, Dana-chambers, Castle-gates, Shrewsbury:—
*Treasure & Son, Ltd., Shrewsbury.

Friern Barnet.—Infants' block at Sydney-road Council school, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect, 10, Gt. George-street, S.W.1:—

F. Cottrell, Ltd., Crouch End	£10,175
W. Lawrence & Son, Ltd., London, E.C.	9,999
G. Groves & Son, Tottenham	9,916
H. Knight & Son, Tottenham	9,855
C. Miskin & Sons, Ltd., St. Albans	9,810
Sims & Russell, Westminster	9,808
Albert Monk, Edmonton	9,750
A. Fairhead & Son, Ltd., Enfiled	9,694
Stevens & Sons, Highgate	9,656
‡C. J. Newby & Bros., Southgate	9,560

Glasgow.—Garage at 60 to 70, Broad-street, Bridgeton, for Messrs. Maver & Coulson, Ltd. Messrs. J. Keppel & Henderson, architects, 267, West George-street:—
*Robt. Corbett, Glasgow.

Glasgow.—Reconstruction scheme at Commercial Bank, St. Vincent-street branch:—
*McDonald & Partners, 135, Wellington-street, Glasgow.
Greys Ferro Concrete Co., Ltd., 201, Bath-street, Glasgow.

Gourock.—New institute and hall for Royal Naval Torpedo Factory Club, Cardwell Bay, Greenock. Messrs. Beston, Menzies & Morton, architects, William-street, Greenock:—
*Robert Kirk, Houston-street, Greenock.

Hull.—Church hall for Parish of St. Ninian's, for Vicar and Wardens. Mr. F. J. Parkinson, architect, 6, Richmond-terrace, Blackburn:—
General contractors—*A. & J. Barnely & Sons, Ltd., Hull.
Joiners—*W. Padgate, Hull.
Lead Lights—*Harrison & Co., Hull.
Electric lights—*Clark & Graham, Hull.
Heating—*J. Grundy & Co., Tyldesley.
Partitions—*Peace & Norquoy, Manchester.
Casement sets—*J. Gibbons, Wolverhampton.
Asphalting—*Northern Asphalting Co., Hull.

Keighley.—Demolition and erection of new works in Mantra Mills, for Messrs. G. Hodgson, Ltd. Messrs. R. B. Broster & Sons, civil engineers and architects, Craven bank-chambers, North-street:—
Masons—*Thomas Duckett & Son, Skipton.
Joiners—*Judson & Steel, Keighley.
Iron and steel works—*Hy. Barrett & Sons, Ltd., Bradford.
Plumbers—*J. W. Cragg, Keighley.
Slaters—*W. H. & R. Walton, Keighley.
Patent glazing—*W. H. Heywood & Co., Ltd., Huddersfield.

Kingsbury.—New County School in Princes-avenue, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect, 10, Gt. George's-street, S.W.1:—

Patman & Fotheringham, Ltd., Islington	£48,817
W. Lawrence & Son, Ltd., London, E.C.2	47,871
H. Knight & Son, Tottenham	47,334
A. Fairhead & Sons, Ltd., Enfield	46,425
W. Lacey, Hounslow	45,375
L. & W. Whitehead, Ltd., Clapham	44,700
C. Miskin & Sons, Ltd., St. Albans	44,219
Albert Monk, Edmonton	44,060
Y. J. Lovell & Son, Gerrards Cross	43,679
W. S. Try, Uxbridge	43,643
‡J. Laing & Son, Ltd., Mill Hill	43,638

Kingston-on-Thames.—Alterations to the girls' and infants' departments of Richmond-road school, for the T.C.:—
*H. J. Budd & Sons £106 8

Kingston-on-Thames.—Internal decoration of 71 houses in Waters-road and Nos. 61-103 (odd) inclusive, Cambridge-road, for the T.C.:—
*Haggis & Son £434 12

Kingston-on-Thames.—Construction of the roads and sewers in connection with the additional 140 houses, for the T.C.:—
*Tarslag (1923), Ltd., Dagenham £6,851 6 10

Kingston-on-Thames.—Internal decorations to the police court, for the T.C.:—
*Limpus & Son £151 2 9

Lancaster.—Vicarage for St. Luke's Church, Slyne-with-Hest, for Parochial Council and Vicar, Rev. A. Warburton. Mr. Robert Martin, L.R.I.B.A., Diocesan Surveyor, 90, Deansgate, Manchester:—
*R. L. Dilworth, Lancaster.

Leeds.—Reconstruction of shop premises fronting King Edward-street, for Messrs. H. & D. Hart. Mr. Geo. Shipley, architect, The Headrows, Leeds:—
Builder's work—*Wm. Irwin & Co., Ltd.
Shopfitters—*John Curtis & Co., Ltd.

Leeds.—Constructional steelwork in connection with the new civic buildings fronting Calverley-street, for the Corporation.
*E. Wood & Co., Ltd. £27,298

Llangollen. — Reconstruction of buildings for theatre and café, for Mr. Horspool. Mr. W. Longworth, architect, 4, Parsonage, Manchester:—
*Hallwoods, Ltd., Hyde.

¶London.—The following works contracts have been placed by the War Office during the week ended January 29:—
Woolwich, Royal Arsenal, etc.—artificers' work—H. J. Gower, Ltd., London, E.C.4.
Aldershot, Waterloo Barracks (East)—dining-room and cookhouse block—Lee Brothers (Aldershot), Ltd., Aldershot.

¶London.—Tenders accepted by H.M.O.W. for the week ending January 31:—
Purley Telephone Exchange—heating and hot water services—The Calor Engineering Co., Ltd., 33, Westbourne-terrace, Paddington, W.2.
Tile Hill (Coventry) Telephone Exchange—erection—W. R. Lane, Fisher-road, Coventry.
Deptford Employment Exchange—alterations—T. D. Leng, Czar-street Works, Deptford, S.E.8.
Mansion House, Brecon—alterations to form a post office and telephone exchange—Bradford & Davies, Fox-lane, Cardiff.
Extension of the sub-station coal bunkers and tanks at the new Letter Office, Mount Pleasant, E.C.—H. Lacey & Sons, Hazelbury-crescent, Luton.
Shoreham Telephone Exchange—erection—J. B. Sharman, Ltd., West Cliff-road, Ramsgate.

London.—Adaptation of a portion of the Council's new Riverside Wharf for depôt purposes, including the erection of stables, mechanical vehicle and cart sheds, alterations and additions to existing buildings, paving and drainage works, for the Hammersmith, B.C. Mr. R. Hampton Clucas, L.R.I.B.A., Borough Engineer and Surveyor:—

A. E. Farr	£31,075 12 0
W. S. Barton & Co.	29,900 5 8
E. A. Russell, Ltd.	29,690 2 0
Ebenezer King, Ltd.	28,006 0 0
F. Coyle & Co., Ltd., Brentford	27,956 0 0
W. J. Marston & Son	27,800 0 0
W. Walkerdine, Ltd.	27,395 18 11
G. H. Dibblin, Dartford	27,145 0 0
R. J. Rowley, Ltd.	26,982 0 0
S. E. Moss & Sons, Chelmsford	26,978 6 4
E. D. Winn & Co., Ltd.	26,974 0 0
W. H. Cooper & Son	25,978 0 0
A. Roberts & Co., Ltd.	25,930 2 9
Hammond & Barr, Ltd.	25,923 0 0
R. Mansell	25,865 13 8
Allen Fairhead & Sons, Ltd., Enfield	25,736 0 0
Pascall & Son, Ltd., Downplace, W.6	25,656 0 0

(Remainder of London.)

London.—Wiring and fittings for electric lighting of 39 blocks of dwellings at Streatham-hill estate, for the L.C.C.:—

"Servu," Beckenham	£4,900 15 0
Phillips & Sons, Ltd.	4,524 0 0
Commercial Lighting, Heating & Power Co.	4,414 10 0
Edward Girdler	4,367 12 10
John Stewart & Co.	4,176 5 0
Read & Partners, Ltd.	3,884 13 0
Alpha Manufacturing & Electrical Co., Ltd.	3,479 15 6
Power & Lighting Installation Co.	3,467 14 6
J. Holbrook & Tattersall, Ltd.	3,338 19 0
Alexander Hawkins & Sons	3,228 0 0
W. H. Gaze & Sons, Ltd., Kingston-on-Thames	3,110 10 11
W. T. Canning & Co., Ltd.	3,102 13 4
Peter Jones, Ltd.	3,090 9 11
Hall & Stinson, Ltd.	2,675 12 6
A. Meckonik	2,536 15 2
Saunders & Co.	2,467 13 0
G. H. Denne & Son, Ltd.	2,467 0 0
The City Electrical Co.	2,424 5 7
*Building & Colliery Supply Co., Ltd., Doncaster	2,392 9 4

(All of London.)

London. — Decorative work in the resident engineer's flat, installation of a new shower bath in the second-class swimming bath, providing and fixing two bracket lanterns at the main entrance and repairing lavatory partitioning at the Buckingham Palace-road bath, for the Westminster City Council. City Engineer:—

The Army & Navy Co-operative Society, Ltd.	£371 19 6
W. Lilly & Co.	309 0 0
E. Jenner, Ltd.	306 3 11
F. C. Hoskins & Co.	304 0 0
*Sims & Russell	296 0 0

(All of London.)

London.—Repairs to the floor of the gallery in the first-class swimming bath, Great Smith-street, for the Westminster City Council. City Engineer:—

Griggs & Son, Ltd.	£249 0 0
John Garlick, Ltd.	133 14 0
W. Lilly & Co.	128 0 0
Sims & Russell	122 0 0
*E. Jenner, Ltd.	102 6 7

(All of London.)

London.—Alterations to sanitary accommodation and shower baths at the Great Smith-street bath, for the Westminster City Council. City Engineer:—

E. Jenner, Ltd.	£1,251 15 5
Griggs & Son, Ltd.	1,071 0 0
B. Finch & Co.	855 0 0
W. Lilly & Co.	815 0 0
John Garlick, Ltd.	792 0 0
*Sims & Russell	738 0 0

(All of London.)

London.—Proposed garage, filling station, showroom and offices at 35, High-street, Hampstead, N.W.3, for Messrs. Simmons and Derby, Ltd.:—

W. H. Cooper & Son, London	£7,165
W. H. Wagstaff & Sons, London	6,926
E. A. Russell, Ltd., Walthamstow	6,907
F. H. Dickman, Hanwell	6,832
W. M. Brand, Stamford Hill	6,827
C. & F. Bryen, Crouch End	6,681
Sabey & Son (Islington), Ltd., London	6,650
F. Troy & Co., Ltd., Finchley	6,603
J. R. Mclean Keil, Camberley	6,574
E. C. Hughes, Wokingham	6,464
Ebenezer King, Ltd., London	6,444
Crosby & Co., Ltd., Farnham	6,354
D. G. Somerville & Co., London	6,175
A. Tavener & Son, Finchley	6,084
W. A. Taylor, Finchley	5,984
J. & R. Thompson, Ltd., Acton	5,836
Perry & Perry, London	5,797
Runham Brown Bros., Clapton	5,704
Hoad & Son, North Wembley	5,670

London.—Elementary school and caretaker's house in Back-alley site, Bow, for the L.C.C.:—

	(*i*).	*Empire materials.*
W. Harris, Ltd.	£18,285	No variation.
Negus, Ltd.	18,178	,,
L. H. & R. Roberts	17,198	,,
G. H. Denne & Son, Ltd.	16,966	,,
Charles R. Price	—	£16,919
A. E. Symes, Ltd	16,737	16,793
J. & C. Bowyer, Ltd.	17,545	No variation.
A. T. Rowley	17,500	,,
Fred & T. Thorne	17,411	,,
E. A. Roome & Co., Ltd.	16,688	16,888
Albert Monk	16,430	No variation.
C. P. Roberts & Co., Ltd.	16,400	,,
*Patman & Fotheringham, Ltd., Park-street, Islington, N.	16,123	,,

Architect's estimate on (*i*) £16,519.

(All of London.)

London.—Heating the South-East London technical institute, Deptford, for the L.C.C.:—

	(*i*).	*Empire materials.*
Adams Bros. & Broadbridge, Ltd., Brighton	£5,306	£5,306
Thames Bank Iron Co., Ltd.	4,715	4,715
Comyn Ching & Co., Ltd.	4,686	4,686
J. T. Meredith & Co., Ltd.	4,580	4,580
W. G. Cannon & Sons, Ltd.	4,534	4,534
Heywood & Bryett	4,460	4,485
Clark, Hunt & Co., Ltd.	4,199	No variation.
The National Heating Co. (1928), Ltd.	4,139	4,356
*Saunders & Taylor, Ltd., 118-122, Holborn, E.C.1	—	4,125

Architect's estimate on (*i*) £4,770.

(All of London.)

London.—Ten playsheds at Council schools at Downham, for the L.C.C.:—

	(*i*).	*Empire materials.*
Burnand & Pickett, Ltd.	£2,193	£2,223
Henry Kent (Builders), Ltd.	1,690	1,738
Hill & Gurr	1,589	No variation.
William Bailey & Sons (Builders), Ltd.	1,550	,,
Harry Groves & Son	1,495	,,
Alan V. Goad	1,489	,,
W. J. Dixon & Sons	1,447	,,
Thomas D. Leng	1,438	,,
Humphreys, Ltd	1,300	,,
William Harbrow (1928), Ltd., South Bermondsey, S.E.16	1,261	,,

Architect's estimate on (*i*) £1,247.

(All of London.)

London.—Repairs to the gallery in the first-class swimming bath, Buckingham Palace-road, S.W.1, for the Westminster City Council. City Engineer:—

F. C. Hoskins & Co.	£166 7 6
The Army & Navy Co-operative Society, Ltd.	159 1 0
W. Lilly & Co.	150 0 0
Sims & Russell	148 0 0
*E. Jenner, Ltd.	138 1 1

(All of London.)

London.—Alterations are being carried out at 11, High-street, Camden Town:—

*Stanley Jones & Co., Ltd., London, W.12.

London.—Alterations, with new Staybrite arcade fronts, at 90, Berwick-street:—

*Stanley Jones & Co., Ltd., London, W.12

London.—Erection of block 6 of dwellings on Dickens estate, Hickman's Folly area, Bermondsey, for the L.C.C.:—

		Empire materials.
Leslie & Co., Ltd.	£21,700	£21,700
E. D. Winn & Co., Ltd.	21,616	22,307
The Unit Construction Co., Ltd.	21,495	21,495
A. E. Symes, Ltd.	20,208	20,262
C. Miskin & Sons, Ltd., St. Albans	20,192	20,302
A. T. Rowley	20,139	20,139
Thomas & Edge, Ltd.	19,830	20,035
Lole & Co., Ltd.	19,727	19,813
F. R. Hipperson & Son	19,842	19,600
Gee, Walker & Slater, Ltd.	19,383	19,383
Albert Monk	19,360	19,360
Rowley Brothers (1929), Ltd.	19,291	19,421
G. H. Denne & Son, Ltd.	19,196	19,196
John Marsland & Sons, Ltd.	19,105	19,105
J. E. Billings & Co., Ltd., Victoria-street, S.W.	18,810	18,880

Architect's estimate on (1) £19,098.

(All of London.)

London.—Installation for wiring and fittings for electric lighting, cooking and heating in 121 tenements of Levita House, Ossulston estate, St. Pancras, for the L.C.C.:—

Crabb & Son, Ltd.	£4,474 15 0
A. Higginbotham & Sons, Idle	2,841 10 0
Phillips & Sons (Chiswick), Ltd.	2,725 19 0
Alpha Manufacturing and Electrical Co., Ltd.	2,681 2 4
W. T. Canning & Co., Ltd.	2,404 10 11
H. E. Thorpe & Sons	2,373 5 5
Alexander Hawkins & Sons	2,298 0 0
J. Briggs (Electrical Contractor), Ltd.	2,248 4 1
Peter Jones, Ltd.	2,151 13 4
Piggott Brothers & Co., Ltd.	2,019 17 0
Carr Brothers	2,009 0 0
Hall & Stinson, Ltd.	1,899 5 3
The City Electrical Co.	1,712 9 0
*Saunders & Co., Westminster	1,686 7 0

Chief Engineer's estimate, £2,600.

(All of London.)

London.—New bronze metal fronts, at 10, Walker's-court, W.:—

*Stanley Jones & Co., Ltd., London, W.12.

London.—Elaborate Staybrite works, at 33, Cannon-street, for London, Midland and Scottish Railway:—

*Stanley Jones & Co., Ltd., London, W.12.

Manchester. — Branch library on Wilbraham estate, for the T.C. Mr. H. Price, A.R.I.B.A., City Architect:—

‡Normanton's, Ltd., Manchester £14,000

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Morecambe and Heysham.—Junior school in Lancaster-road, for the E.C. Mr. P. W. Padmore, Borough Surveyor:—

*W. Huddestone, Morecambe £15,650

Morpeth.—For the erection of 150 houses on the Springwell estate, for the Morpeth Corporation (Northumberland). The Corporation's Architect:—

*E. Bruce & Sons, Ltd.

Nelson (Lancs).—Senior school at Edge End, for the T.C. Mr. F. V. Alexander, Borough Surveyor:—

*Corporation Works Department £35,265

Newcastle-upon-Tyne. — Garage in Jesmond. Messrs. Dunn, Hanson & Fenwicke, architects, Emerson-chambers:—

*J. Rutherford & Son, Jesmond, Newcastle.

North Kingsbury.—Elementary school, Bacon-lane, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect:—

Patman & Fotheringham, Ltd., Islington	£22,564
W. Lawrence & Son, Ltd., London, E.C.	21,667
H. Knight & Son, Tottenham	21,498
W. Lacey, Hounslow	20,763
A. Fairhead & Sons, Ltd., Enfield	20,496
L. & W. Whitehead, Ltd., Clapham	19,796
Albert Monk, Edmonton	19,700
Y. J. Lovell & Son, Gerrard's Cross	19,636
W. S. Try, Uxbridge	19,326
C. Miskin & Sons, Ltd., St. Albans	19,313
‡J. Laing and Son, Ltd., Mill Hill	19,142

Pevensey.—Improvement of part of Bexhill coastal road and construction of new road beside existing one between Pevensey and Constable Farm, Bexhill, for total length of 3¾ miles, together with construction of three reinforced concrete bridges and contingent works, for the East Sussex C.C. County Surveyor:—

*Tileman & Co., Ltd., 22, Carlisle-place, Westminster, S.W.1.

Plymouth.—Conversion of market inspector's house, Cornwall-street, into shop premises, together with new shop front, for the T.C. Mr. J. Wibberley, City Engineer and Architect:—

*Wakeham Bros., Ltd., Friary Yard, Knighton-road, Plymouth.

Preston.—Bus garage and trackless tram depôt, The Moor, Deepdale, for the C.B. Mr. W. Platt, Borough Engineer and Surveyor, Birley-street:—

*H. H. Topping & Son, Lytham-street, Fulwood, Preston £8,390

Preston.—Alterations at the Crown-street Works, for the T.C.:—

*Wm. Jackson & Sons £602 3 6

Rathmore.—For a public elementary school, for the Antrim Regional E.C. Mr. W. D. R. Taggart, architect, Scottish Provident-buildings, Belfast:—

W. Kerr, Belfast	£3,547 8 7
Thompson Bros., Belfast	3,280 0 0
Girvan & Sons, Larne	3,240 0 0
Frazer & Co., Belfast	3,213 0 0
J. & R. Thompson, Belfast	3,120 0 0
David Patton, Ballymena	3,117 3 11
Thomas Mayne, Belfast	3,107 17 3
A. Murdock, Belfast	2,980 0 0
John Carson, Ballymena	2,956 10 0
Hughes & Thompson, Lisburn	2,940 16 1
James Moreland, Belfast	2,937 0 0
D. McKee, Ahoghill	2,900 10 8
F. B. McKee & Co., Belfast	2,875 0 0
Harding & Harding, Belfast	2,869 0 0
McAuley & McIlroy & Co., Belfast	2,865 0 0
J. Elliot, Belfast	2,812 0 0
Isaac Copeland & Sons, Belfast	2,750 0 0
H. McLaughlin, Whitehouse	2,650 0 0
*S. Boal, Antrim	2,602 19 6

Redcar.—Subway under Redcar East Halt, for the L.N.E.R. Co.:—

*John Lant, Ltd., Pilgrim-street, Newcastle.

Rowley Regis.—Alterations, etc., to present senior boys' school, Trinity-street, Old Hill, for the E.C. Messrs. Pritchard, Godwin & Clist, chartered architects, Bank-buildings, Kidderminster:—

*Housing, Ltd., Birmingham.

Rushden.—Boot factory in Park-road, for Messrs. John White (Impregnable Boots), Ltd., Manton-road. Mr. A. Sanders, architect, Coffee Tavern-lane:—

*A. Sanders, Rushden.

Salop.—Additions to (*a*) Highley school, and (*b*) Ludlow school, for the Education Committee:—

(*a*) *W. R. Sheratt, Church Stretton, Salop	£2,382
(*b*) *W. R. Sheratt, Church Stretton, Salop	2,363

Shardlow.—For sewerage works at Sandiacre, for the R.D.C. Messrs. Elliott & Brown, chartered civil engineers, Burton-buildings, Parliament-street, Nottingham:—

F. Perks & Son, Ltd., Long Eaton	£3,110 0
F. Hasiam, Ltd., Doncaster	2,664 9
D. Roberts & Son, Ilkeston	2,600 0
A. Earnshaw & Son, Ilkeston	2,551 0
*Bentley & Wardman, Bradford	2,420 10

Sheffield.—Store on Wisewood estate, for the Brightside & Carbrook Co-operative Society, Ltd., Exchange-street, Sheffield. Mr. B. Webster, architect, St. Marie's-chambers, Norfolk-row:—

*Works Department, Co-operative Society.

Sheffield.—New Staybrite fronts, at 95, The Moor:—

*Stanley Jones & Co., Ltd., London, W.12.

South Shields.—Fire station and headquarters, for the Corporation. Messrs. T. A. Page & Sons, architects, 37, King-street:—

*Gustavus & Bailey, Ltd., South Shields £11,565

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South Shields.—29 houses. Messrs. T. A. Page & Sons, architects, 67, King-street:—

*Milton Swales.

Southam.—New schools for Church of Our Lady and St. Wulstan, Wood-street, for Rev. J. J. Budgen. Messrs. Sandy & Norris, F.R.I.B.A., architects, 22, Greengate, Stafford:—

*Hall & Son, Coventry.

Surbiton.—Pipe-laying in the higher parts of Esher and the Dittons and Surbiton, for the M.W.B.:—

D. J. Thomas	£21,796 9 4
Jowett & Co., Ltd.	18,229 19 6
John Cronk & Sons	17,108 0 0
Howard Farrow, Ltd.	14,363 12 0
J. B. Edwards & Co. (Whyteleafe), Ltd.	13,998 9 8
William Press & Son	13,997 0 10
John Mowlem & Co., Ltd.	12,874 2 4
Lee Brothers (Contractors), Ltd.	12,784 11 7
W. & C. French	12,434 7 5
‡Whittaker Ellis, Ltd.	12,103 15 1
E. D. Winn & Co., Ltd.	11,678 11 5

Swannington.—New miners' institute at Swannington:—

*J. G. Lidwell, Swannington £1,445

Thornliebank.—Six shops at Boydstone-road. Messrs. Jno. Hamilton & Son, architects, 112, Bath-street, Glasgow:—

*J. Parker, Ltd., Building Specialists, Riddrie.

Tonbridge.—30 houses on the Priory Mill No. 3 estate, for the U.D.C. Mr. Wm. Laurence Bradley, housing architect:—

G. & F. Penn, Pembury	£11,520 0 0
Kent Building Construction Co., Ltd., Sidcup	11,440 0 0
A. L. Standen, Tonbridge	10,896 0 0
L. Thorpe, Southborough	10,661 8 10
J. C. Elkington, Avebury-avenue, Tonbridge	10,440 0 0
East Kent Building Co., Dover	10,116 0 0
‡J. E. Woolley, Bordyke Works, Tonbridge	10,016 0 0
Bennett & Smith, Sheerness	9,996 0 0

Twickenham.—Two non-parlour type houses at 164/166, Colne-road, for the T.C.:—

*Fox & Champion, Hounslow £869 10
(Subject to sanction of M.H.)

Twickenham.—New bronze metal shop fronts at 29, King-street:—

*Stanley Jones & Co., Ltd., London, W.12.

Welshpool.—Offices for the Montgomeryshire C.C. Messrs. Briggs & Thornely, F.R.I.B.A., architects, 612, Royal Liver-buildings Liverpool:—

*F. Roberts & Son, Trevor Ruabon ... £8,795

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Whittlesey.—12 houses at Coates, for the U.D.C. Mr. A. J. Brantom, surveyor. Quantities by the surveyor:—

A. R. Hazell, Peterborough	£4,616 12 6
J. & W. Duddington, Whittlesey	4,585 10 0
Rose & Son, Whittlesey	4,507 10 0
Hawkins & Son, Fletton, Peterborough	4,500 0 0
*A. Pettitt & Son, Ramsey	4,290 0 0

Wolverhampton.—Extensions at Grainsley school, for the E.C.:—

*H. J. Amies & Sons, Wolverhampton £25,255

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